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# Computer Simulation: A Methodology to Improve the Efficiency in the Brooke Army Medical Center Family Care Clinic (A Patient Wait Case Study)

# DISTRIBUTION STATEMENT A

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A Graduate Management Project Submitted to:

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24 March 2000

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#### Abstract

The executive leadership at Brooke Army Medical Center (BAMC) believes there are inefficiencies, characterized by poor access, high patient total time in the clinic, high patient wait time and inappropriate resource utilization in the BAMC primary care clinics. The tool of computer simulation was selected to assist in reengineering the primary care clinics at BAMC to improve efficiency and patient satisfaction. This study focused specifically on the BAMC Family Care Clinic (FCC). The purpose of this study was to describe the current system and to evaluate the potential impact of process and resource changes in patient wait times, access and resource utilization at the BAMC Family Care Clinic (FCC). Base models were developed to replicate current FCC operations and tested for validity before creating all alternate models. The base models were utilized to compare results of proposed process and resource changes (alternate models). Alternate models were compared to the base model for the time the patient waits for the PCPs (Primary Care Providers), the total time a patient is in the clinic and resource utilization (e.g. PCPs, LVNs [Licensed Vocational Nurse] and exam rooms). Comparison of model outputs revealed that two alternate models generated lower patient wait times in the clinic than the base model. These alternate models' resources were individually changed to determine the effect on the models outputs. Ultimately, these alternate models' multiple resources were optimized at 110, 120 and 130 percent of FY99 FCC visits to ascertain the best process and resource mix to improve access and patient wait times in the FCC.

# TABLE OF CONTENTS

ACKNOWLEDGMENTS.	•		•		•	•	•			•			ii
ABSTRACT	•		•				•	•	•	· •	•		iii
LIST OF TABLES						٠	•	•	•			•	vi
LIST OF FIGURES		•	•	٠			•	. •	•			•	vii
INTRODUCTION													1
Conditions Which Prom	nted i	the S	Studs	· (Ba	ckor	າດເເກ <i>ເ</i>	Ð.	•	•	•	•	•	1
Statement of the Problem				(24	_		-	•	•	•	•	•	3
Literature Review .							•	•	•	•	•	•	
_				•			•			•			4
•									•	•	•	•	8
Limitations and Assump	tions	•	•	•	•	•	•	•	•	•	•		9
) (EMILOD 1) ED DE CONTROL													
METHOD AND PROCEDU		•	•		•	٠.							9
Goals and Objectives of													11
Model Formulation and l	Plann	ing	•										11
Data Collection											_	_	15
Model Development, Ve	rifica	tion.	Val	idati	on a	nd R	elial	hility	•	•	•		15
Ethical Considerations									•	•	•	•	19
	-		•	•	•	•	•	•	•	•	•	•	1)
MODEL EXPERIMENTATI	ON.	ANA	LΥ	SES	ANI	n R F	SIT	ZT I					19
								DID.	•	•	•	•	20
Impact of Resource Char		•	•	•	•	•	•		•	•	•	•	
		. (0	\4:	.:	•	•	•	•	•	٠	•	. •	20
Designing an Improved S	yster	m (U	pun	ıızatı	on)	•	•	•	•	•	•	•	25
DIGGLIGGIOX													
DISCUSSION	•	•	• .	•	•	•	•	•	•	•	•.	•	27
Interpretation of Results							•	•		•			27
Presentation of Results													31
CONCLUSION AND RECO	MME	END	ATI	ONS									31
					•	•	•	•	•	•	•	•	31
APPENDIX A: Tools Used in	Aca	nirir	σFτ	nniri	cal I	Data							34
A-1: FCC Time Study Sh									•	•	•	•	
A 2: Input Variables Input	1001 14 Tila	• T	· ::	- 01-	•	•	•	•	•	•	• .	•	34
A-2: Input Variables Inpu	11 L IO	W 13	ımın	g Sno	eet	•	•	•	•	•	•	•	35
ADDED TO THE O	_												
APPENDIX B: FCC Patient I			n.	•	•	•	•	•		•	•	•	36
B-1: Patient Demographic			•	•				•					36
B-2: Patient Utilization				•	•								38
													-
APPENDIX C: FCC Floor Pla	an.						•						46

APPENDIX D: Statistical Analyses.	47
D-1: Validation of Oct 99 Status Quo Models to Empirical Data (wait times).	48
D-2: Validation of Oct 99 Status Quo Models to Empirical Data (total patients)	49
D-3: Validation of FY99 Status Quo Models to Empirical Data (total patients)	50
D-4: Reliability of FY99 Status Quo Models (Different Random Seeds).	51
D-5: Reliability of FY99 Status Quo Models (Multiple Iterations)	53
D-6: Comparison of Alternative-One Models with FY99	"
Status Quo Models (wait times).	55
D-7: Comparison of Alternative-Two Models with FY99 FCC	55
Status Quo Models (wait times).	56
D-8: Comparison of Alternative-Three Models with FY99 FCC	50
Status Quo Models (wait times)	57
D-9: Comparison of Alternative-Three Models with Alternative-One	31
Models (wait times)	58
D-10: Comparison of Alternative-Four Models with FY99 FCC	20
Status Quo Models (wait times)	59
D-11: Comparison of Alternative-Four Models with Alternative-One	5)
Models (wait times)	60
	UU
APPENDIX E: Effects of Changing the Number of PCPs, LVNs, Exam Rooms and	
Appointments (Comparing Alternative-One Models and	
Alternative-Four Models)	61
E-1: Time Patient is in the Clinic (Resource Changes).	61
DAD Truit i m	64
	67
	68
APPENDIX F: Optimization of Alternative-One Models and	
A 12	71
T-1 1100/ CTS700 A	71
T 0 1000/ CETTOO + + +	73
T 2 1200/ CTT700 / /	75
	-
REFERENCES	77

# List of Tables

Table 1: Process Variables and Simulation "Inputs"	•	•	•	14
Table 2: Simulation "Output" Performance Measures			•	14
Table 3: Validation Results of BAMC Status Quo (Oct 99) Models.	•	•	•	18
Table 4: FY99 FCC Utilization	•	•		20
Table 5: Simulation Factors Examined by the Modeler				20
Table 6: Description of Models Used in What-If Analysis				21
Table 7: Summary of Statistical Analyses and Utilization Results .		•		22
Table 8: Optimization Results			•	27
Table 9: Comparison of Optimization Models to Base Models	•			28

# Computer Simulation: BAMC FCC vii

# List of Figures

Figure 1: BAMC September Complain	ts by	/ Are	ea (T	op 6	) .	•	٠	•	•	3
Figure 2: Steps in a Simulation Study	•	•	•	•	•	• ,			•	10
Figure 3: BAMC FCC Patient Flow.			:							12

#### Introduction

### Conditions Which Prompted the Study (Background)

Brooke Army Medical Center (BAMC), located at Fort Sam Houston in San Antonio Texas, serves 185,000 TRICARE beneficiaries in cooperation with nearby Wilford Hall Medical Center (Noyes, Harben, 1998). BAMC's staff provides inpatient/outpatient care, level one trauma and graduate medical education in a modern, state-of-the-art, 450-bed healthcare facility.

Due to healthcare advances and cost containment pressures, BAMC, like other major healthcare facilities, has shifted its focus from inpatient to outpatient care. BAMC has 58 outpatient specialty clinics, which recorded over 353,000 patient visits for fiscal year 1999 (FY99), and seven outpatient primary care clinics, which recorded over 276,000 patient visits for FY99 (Noyes, Harben, 1998; CHCS, October 1999). Only five BAMC primary care clinics enroll TRICARE beneficiaries (BAMC's TRICARE primary care clinics). Three of these primary care clinics are located in the main BAMC building: Pediatrics/Adolescent Medicine, Internal Medicine and the Adult Primary Care Network Clinic. The other two BAMC's TRICARE primary care clinics, General Medicine Clinic (for active duty only) and the Family Care Clinic (FCC), are collocated two miles away from the main BAMC building at the McWethy Troop Medical Clinic.

Traditionally, BAMC's TRICARE primary care clinics provided primary care to active duty personnel and their family members, military retirees under the age of 65 and their families as well as space available care to eligible beneficiaries over 65. Currently, in addition to providing care for these aforementioned healthcare recipients, these clinics have recently expanded their capabilities to support the primary care workload of an

enrolled elderly population of TRICARE Senior Prime (TSP) beneficiaries. These TSP beneficiaries traditionally present with ailments related to chronic conditions thereby increasing the potential to consume more healthcare resources. Overall, these increases in patient load and severity mix have had a significant impact on the efficiency of operations in the primary care clinics (DeMouy, Rozowski, Rusing, 1999).

population of 34,936 (CHCS [Composite Health Care System], August 1999). The BAMC FCC provides primary care services to an enrolled beneficiary population of 9,800 (3,279 active duty family members, 2,166 retirees and their 2,968 family members and 1,387 TSP members under its current configuration) (CHCS, August 1999). BAMC FCC's nine primary care providers (PCPs) had over 44,200 patient visits for FY99 (CHCS, October 1999; Dr. Sauri, Personal Communication, October 1999). FCC's PCPs are comprised by a variety of military personnel, federal employees and contracted care providers, representing different levels of healthcare providers ranging from Family Practitioners, General Medical Officers, Physician Assistants or Nurse Practitioners (Dr. Sauri, Personal Communication, 19 October 1999).

Three of BAMC's TRICARE primary care clinics were among the top six areas of patient complaints for BAMC for the month of September 1999 (Figure 1) (BAMC Patient Representative Log, September 1999). The high number of complaints in the BAMC FCC in particular, in conjunction with the recent enrollment of TSP members have prompted the executive leadership to request a study which focused on improving efficiency and patient satisfaction at the FCC.

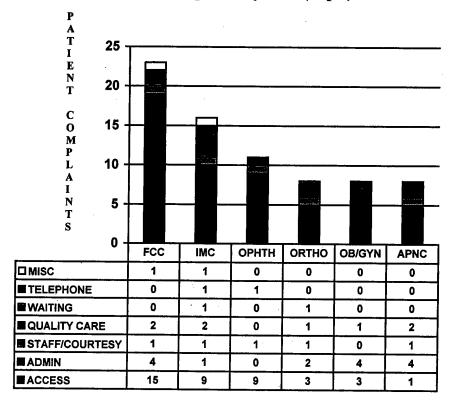


Figure 1: BAMC September Complaints by Area (Top 6)

(Adapted from BAMC September Patient Representative Report, 1999)

### Statement of the Problem

Currently, the BAMC leadership believes there are inefficiencies in the present configurations of the primary care clinics. These inefficiencies are characterized by poor access, high total patient time in the clinic, high patient wait time and inappropriate resource utilization. These inefficiencies were caused when BAMC was required to shift primary focus from graduate medical education to primary care under TRICARE without changing its current organizational structure. Since the greatest number of complaints pertain to BAMC FCC, this study focused on the FCC. If resource inefficiencies do exist in the FCC, this study will aid in identifying where they exist. Additionally BAMC currently has no standard management tool to accurately predict the effect of resource allocation changes within the organization. Building a computer simulation model of the

current FCC will allow the BAMC executive leadership to evaluate future proposed changes in the clinic in a less expensive, less disruptive and more timely manner.

#### Literature Review

The Department of Defense initiated the transition into managed care in the Military Health Service (MHS) on October 1, 1993. The overall goals of the program, called TRICARE, are to improve beneficiary access, ensure quality of care and control healthcare costs (Department of Defense, 1994). According to the current Army Surgeon General, LTG Blanck,

"Managed Care" means managing the healthcare of each patient so that the right level of care is provided at the right time and at the right place...Often managed care means caring for patients on an outpatient basis as opposed to inpatient status when there is no difference in quality of outcome. (Blanck, 1997).

Primary care is key to the success of the MHS under TRICARE. Primary care is defined as the first level of care accessed by the patient (White, 1996). Comprehensive primary care also focuses on the elements of prevention, early intervention and wellness programs (Gapenski, 1996). The key player in the success of managed care is the patient care manager. In the MHS the PCP is the patient care manager. The ideal PCP not only provides comprehensive (broad range of services - acute and chronic disease management), coordinated (aware of patient's entire list of problems), continuous and accountable care but also is accessible to the patient (White, 1996). The PCP coordinates care for the patient throughout the MHS. Family practice/general medicine, internal medicine, pediatrics, emergency medicine and obstetrics/gynecology are provider

categories generally defined as primary care (Kongstvedt, 1997; Booz Allen & Hamilton, 1998).

The appropriate staffing level for PCPs varies depending on the supported population demographics, utilization patterns and the overall mission of the health system. Based on research in 1995, in health systems with less than 80,000 members, the weighted mean PCP staffing ratio was 0.89:1,000 (1 PCP per 1,124 members) with a standard deviation of 0.68. For systems greater than 80,000 members the weighted mean PCP was 0.66:1,000 (1 PCP per 1,515) with a standard deviation of 0.51 (Kongstvedt, 1997). The AMEDD Fort Campbell Staffing Study and the Automated Staffing Assessment Model (ASAM) both consider provider non-patient time in developing their staffing ratios. Both of these systems found that Department of Defense (DoD) PCPs are unavailable for patient services approximately 10% of the time due to specific organizational requirements of the MHS (Booz Allen & Hamilton, 1998). While MHS PCP's time available for patient care is lower than their civilian counterparts, patient utilization rates are significantly higher (as much as 40% increase in demand factor) in MHS than in a civilian system due to the availability of "free care" (Newhouse, 1993).

In addition to enrollee demographics and utilization, a particular clinic's processes and activities can have an enormous effect on the required staffing and overall effectiveness of the clinic. Improving the overall process of patients moving through a clinic can reduce patient wait time and increase the overall access to a clinic. However, managers rarely have the time or resources to experiment with such process changes.

Computer simulation offers managers an accessible, less expensive, less disruptive and more timely means of evaluation (Benneyan, 1997). Simulation is one of the most

widely used methods to evaluate, improve and optimize many types of processes.

Simulation is an imitation of an actual process over time (Levy, Watford, Owen, 1989;

Gogg, Mott, 1993; Benneyan et al., 1994; Benneyan, 1997). Simulation models imitate a

system's behavior, referred to as "baselining", and are then used to evaluate possible changes in its structure, environment or underlying assumptions in the form of "what-if-

analysis" (Benneyan et al., 1994; Bateman, Bowden, Gogg, Harrel, Mott, 1997).

Non-healthcare industries often employ simulation software to assist managers in decision making. Similarly, the advantages of simulation are receiving increased attention within the healthcare industry. The literature consistently notes simulation of patient flow provides invaluable information for senior and mid-level managers in problem solving activities (Benussi, Daris, Crevatin, Nedoclan, 1990; Mahacheck, 1992; Benneyan, Horowitz, Terceiro, 1994; Benneyan, 1997). Benneyan et al. (1994) recommend using computer simulation to test process and resource changes in an organization.

Numerous studies proclaim the advantages of simulation in identifying peak workload requirements and adjusting staffing patterns to increase providers' efficiency and decrease patient wait times (Bell, Warner, Cameron, 1985; Ammari, Abu Zahra, Dreesch, 1991, Benneyan et al., 1994; Hashimoto, Bell 1996; Allen, Ballash, Kimball, 1997; Benneyan, 1997). Simulation results typically identify the largest single challenge facing outpatient facilities is the time patients spend waiting to see a healthcare provider. Asezadeh (1997) noted that medical facilities could take advantage of outpatients' waiting periods, once identified, to disseminate preventive and other cost-effective healthcare information. Additionally, studies that modified clinics' operational

procedures by incorporating simulation results report statistically significant benefits. For example, by incorporating simulation results into clinic operation, Hashimoto and Bell (1996) observed a decreased total time for patients in the clinic from a mean of 75.4 minutes (sd 34.2) to a mean of 57.1 minutes (sd 30.2) (p<.001, t test).

Simulation offers a practical alternative approach to problem solving. Because simulation models evaluate outcomes without actually making changes in the system, simulation modeling can allow the consideration of several alternatives before any resources, especially human, are expended. Healthcare is a dynamic service industry with high human involvement, sporadic workflow and high variability. Benneyan et el. (1994) points out that accountability for the variation of patient arrival times, staff shifts and breaks, queuing and treatment times is vital for accurate statistical results in a process which is dominated by interaction between human beings. A healthcare simulation program, like MedModel® version 4.2, is ideal for healthcare because its dynamic, stochastic (random) method can account for variability and randomness in a process over time and incorporate these attributes into the final analysis (ProModel® Corporation, 1998a).

The appropriate level of detail in a model is extremely important in achieving useful results. The simulator must choose the appropriate level to answer the objective (ProModel® Corporation, 1998a). As the model becomes more complex, it requires additional data and continuous verification. A simulator must understand there is an inverse relationship between model complexity and utility (ProModel® Corporation, 1998a). Once an appropriate simulation model is built, it repeats the process for the

researcher to observe. Since simulation focuses on objective measures of the process, there is a decrease in the amount of researcher bias on the results of the study.

The amount of literature describing simulation applications to healthcare and patient scheduling is increasing substantially (Kalton, Singh, August, Parin, Othman, 1997; Benneyan, 1997). The use of simulation as a technique for evaluating military primary care facilities, like BAMC FCC, is also gaining momentum. In 1994 Reese developed a computer simulation to assess the effects of proposed changes on Martin Army Community Hospital Emergency Department. Two years later, an animated simulation was used to determine the optimal staffing and process configuration for the Heidelberg Medical Department Activity Family Practice Clinic (Ledlow, 1996; Ledlow, Bradshaw, 1999). In 1998 Fay used simulation to compare three Ireland Army Community Hospital Primary Care Clinics and ultimately recommended process and staffing changes. Similarly, computer simulation has been used to analyze staff utilization and patient waits to modify processes of Fort Monroe Health Clinic prior to facility occupation (Duray, 1998). Fulton, also in 1998, developed an outpatient model to assist in reengineering Bayne-Jones Army Community Hospital.

### Purpose

The purpose of this study is to describe the current system and through the development of a simulation model to evaluate the potential impact of process and resource changes on patient wait times, access and resource utilization on the BAMC FCC. Additionally, building a computer simulation model of the current FCC provides the FCC leadership the capability to evaluate future proposed changes in the clinic in a more timely, less resource intensive manner. The terminal objective of this project is to

determine resource levels and processes for the FCC that will improve operational efficiency. Efficiency, for this study, is defined as decreased patient total time in clinic, increased patient access (i.e. increased number of available appointments) and appropriate resource utilization.

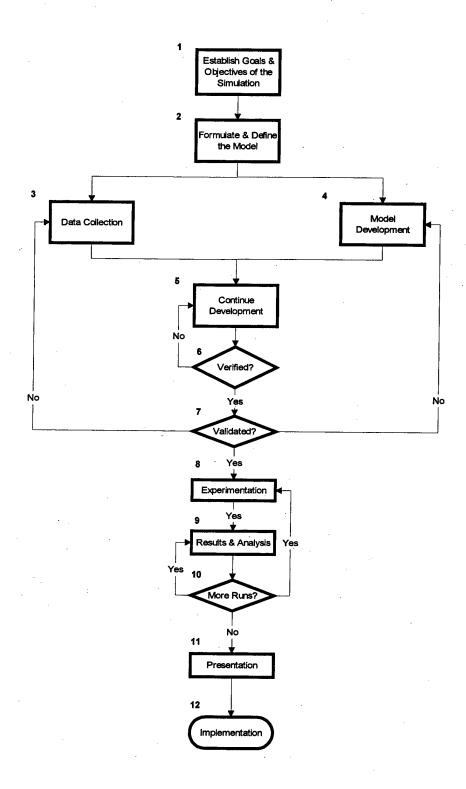
#### <u>Limitations and Assumptions</u>

As with any study, certain limitations and assumptions must be identified. The primary limitation of this study is that the simulation model can not replicate every variable or occurrence of the FCC system. The complexity of such a detailed model would actually decrease its utility. The major assumption governing this study was that a one-month time study of the FCC was sufficient to attain an accurate representation of the current system. A second assumption was that all data collected relating to workload and appointment scheduling were accurate. The following Department of Defense databases was utilized for data collection: Ambulatory Data System (ADS) and the Composite Health Care System (CHCS).

#### **Method and Procedures**

Even though each simulation is unique, past studies have shown a series of steps that lead to a successful simulation model. Steps common to successful simulation are: establish goals and objectives of the simulation; formulate and define the model; collect data; build, verify and validate the model; and experiment, analyze and present results (ProModel®, 1998c; Benneyan, 1997). This graduate management project followed the above format. Figure 2 is provided to illustrate the interrelationships between these steps.

Figure 2: Steps in a Simulation Study



(Adapted from Bateman, Bowden, Gogg, Harrell, Mott, 1997)

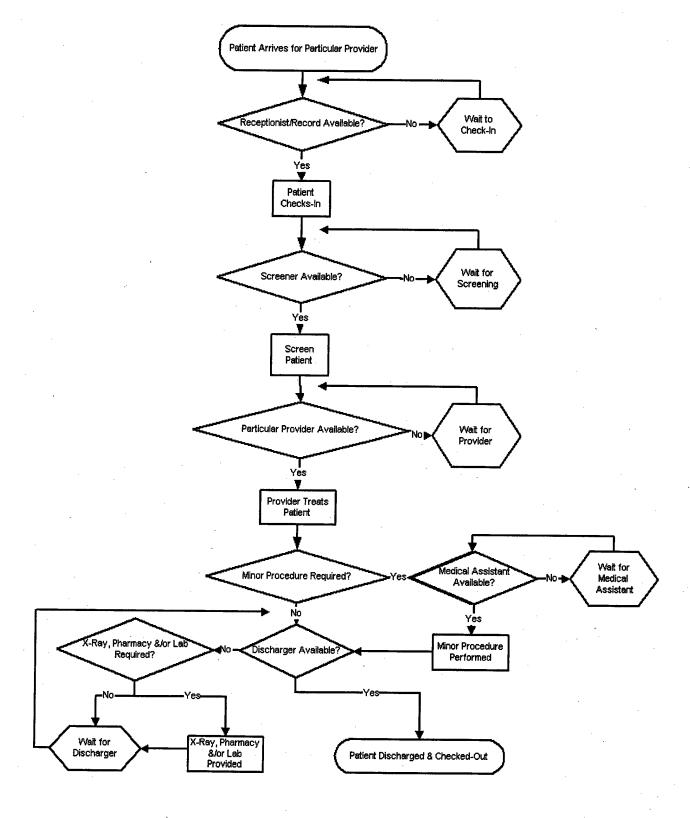
# Goals and Objectives of the Simulation

The goal of this simulation was to generate information that can be used by the BAMC leadership to make appropriate decisions resulting in increased operational efficiency in the FCC. In order to attain this goal, the following objectives were established: (1) describe the current system, (2) evaluate the impact of process and resource changes on patient wait times, access and resource utilization, and (3) design an improved system for the FCC. The development of a MedModel® simulation model aided in achieving these objectives. Additionally, building a computer simulation model of the current FCC provided the FCC leadership the capability to evaluate future proposed changes in the clinic in a more timely, less resource intensive manner.

### Model Formulation and Planning

Once the modeler and the FCC leadership agreed upon the simulation objectives, the next step was to determine a conceptual framework of the model. The first step in understanding a system, like the FCC, was to chart the flow of patients through the facility (Mahachek, 1992). The framework for the FCC model was developed through a patient flow diagram. The patient flow diagram was confirmed with the Chief, FCC and the Head Nurse, Department of Primary Care and Community Medicine (Figure 3).

Figure 3: BAMC FCC Patient Flow



The FCC patient flow process can be summarized as follows. Upon arrival, a patient checks in with the receptionist and/or records clerk and then waits in the waiting area. A screener escorts each patient to a screening room where vitals and general patient information are taken (e.g. height/weight & reason for appointment). After screening the patient is directed back to the waiting area. Once the primary provider is available, the PCP directs the patient to his or her exam room/office. After the appointment is complete the PCP directs the patient to the discharge area or to other ancillary care (e.g. medic for basic procedure, laboratory, x-rays or pharmacy) depending on the situation. A civilian nurse who is responsible for final coordination of patient treatments (e.g. discussing doctor treatment procedures, setting up follow on appointments and discharging the patient) staffs the discharge area. If this individual is not available the patient may wait for the discharger, get prescriptions filled or go to the laboratory.

At the FCC, appointments are conducted from 0730 to 1900 hours, Monday and Thursday and from 0730 to 1600 on Tuesday, Wednesday, and Friday. Physician appointments begin between 0730 and 0900 and are scheduled for fifteen minutes to forty minutes depending on the type of appointment and patient. Most providers take a short lunch break around 1200. Primary care appointments begin again for the majority of the providers at 1300 hours. Most provider appointments continue until 1600. On Monday and Thursday, two providers' appointments continue to 1900.

Creation of a flowchart assisted in the development of decision variables in the FCC process. In order to develop these models, certain process decision variables (variables that management has control over) as well as uncontrollable variables such as patient

timeliness, had to be collected. Table 1 lists the primary "inputs" included in the FCC model.

Table 1: Process Variables and Simulation "Inputs"

Number of:	Distribution of Time for:
<ul> <li>Receptionists</li> </ul>	Patient Arrival
• Screeners	Patient to Check-in
<ul> <li>Screening Rooms</li> </ul>	Screener to Screen Patient
• Providers	Provider to Examine Patient
• Total Appointments	<ul> <li>Discharger to Discharge Patient</li> </ul>
Total Exam Rooms	
<ul> <li>Dischargers</li> </ul>	General Facility Layout
• 91Bs	
Education Nurses	

Table 2 lists the "output" performance measures that were collected from the FCC model.

However, the modeler in conjunction with the FCC leadership determined the output performance measures in bold were the most relevant to increasing efficiency as defined in this study. Therefore only the output performance measures in bold were analyzed.

Table 2: Simulation "Output" Performance Measures

	Patient Waits:		Location & Number of Patients:
•	Total Patient Wait	•	Waiting to Check-In
•	Wait for Receptionists	•	Checking-In
•	Wait for Screening Room	•	In Waiting Room
•	Wait for Screeners	•	Waiting for Screener
•	Wait for Exam Room	•	Being Screened
•	Wait for Provider	•	Waiting For Provider
•	Wait for Discharger	•	Being Examined
•	Total Time Until Seen By Provider	•	Waiting For Discharger
•	Total Time in FCC	•	Being Discharged (follow-up appt
	•		arranged)
	Resource Utilization:		
•	Receptionist Idle Time & Utilization	,	Total Number of Patients:
•	Screener Idle Time & Utilization	•	Arrived
•	Provider Idle Time & Utilization	•	In FCC
•	Waiting Room Utilization	•	Departed
•	Screening Room Utilization		
•	Exam Room Utilization		

#### **Data Collection**

Several ongoing methods were used to collect data for input variables of the model throughout the study. A time study was initiated on 1 October 1999 (Appendix A: Tools Used in Acquiring Empirical Data). Observations and personal interviews began in October and continued throughout the project. Interviews with the staff provided important information on daily work hours, personnel shifts and lunch breaks.

Historical data on clinic visits were collected from BAMC database systems (e.g. ADS and CHCS). The primary source was CHCS. Adhoc CHCS reports provided information for model inputs such as: the number of patients seen in the clinic by appointment type per month as well as the number of patients seen/appointments scheduled for each physician per month. In order to gather the needed data, Adhoc CHCS reports were run for BAMC FCC for Fiscal Year 1999 (Appendix B: FCC Patient Information).

The collected data was matched to an appropriate frequency distribution by using Stat::Fit®, a curve-fitting program in MedModel® version 4.2. These frequency distributions were placed into MedModel® to represent patient inter-arrival times, process duration times and probabilities of occurrences.

## Model Development, Verification, Validation and Reliability

The models were built using version 4.2 of the MedModel® simulation software bought from ProModel® Corporation. MedModel® is computerized simulation software specifically designed to model medical processes. Six elements common to any MedModel® simulation model include entities, locations, arrivals, pathways, processes and resources. Entities are objects that have actions performed upon them (e.g. patients,

medical charts, lab samples, x-ray, etc). Locations are the places where the activities associated with entities occur (e.g. treatment rooms). Arrivals describe patterns (e.g. frequency and time) related to when and how entities enter the system. Pathways represent the route entities take as they travel through the system (pathways can differ based on the type of entity – e.g., child vs. adult – and the actions performed on the entity). Processes are actions done to an entity (e.g. what action is performed, rules for prioritizing which entity is acted upon, identifying who performs the action, how long it takes and what happens to the entity when the action is completed). Resources perform processes on entities (e.g. physicians, nurse, etc.); resources limit the capacity of the system (ProModel®, 1998a; ProModel®, 1998c). Through MedModel® the modeler converted the actual workings of the system, shown in Figure 2, to these different elements in order to simulate actual FCC operations.

The Head Nurse, Department of Primary Care and Community Medicine provided the original floor plan of the McWethy TMC. This version was edited in Microsoft Paint© to reflect the present layout of the TMC (Appendix C). The programmer then imported the image to MedModel® simulation software and sized the image using the grid setting option to accurately depict the correct relative square footage of the TMC.

The actual development of the simulation was incremental, with process detail and complexity added in a stepwise fashion. After each process was modeled it was debugged (reconciled) and verified before the next process was added. Ultimately two BAMC FCC Status Quo Models evolved to sufficiently meet the study's first objective. One model simulated Monday and Thursday extended day operations while the other model simulated Tuesday, Wednesday, and Friday normal day operations.

A model is verified when it processes data as intended by the modeler and has the ability to generate output information that can satisfy the objectives of a study (Mahachek, 1992; Gogg et. el., 1993; Bateman et. el., 1997; ProModel®, 1998a). The flow of the patient (entity) in the BAMC FCC Status Quo Models were traced to verify the accuracy of the process, routing and frequency distributions; when an inconsistency was identified it was debugged. This verification process was continued throughout the study.

"Model validation establishes credibility in the model" (Gogg et. el. 1993). A valid model behaves like the actual system in a manner sufficient to address the stated problem (Bateman et. el., 1997; ProModel®, 1998a). Validation was accomplished in a stepwise manner, with each model segment being tested and validated before starting the next. When complete models were constructed, these aggregate FCC Status Quo Models' outputs were validated through statistical analysis that compared model outputs with data gathered through previous observations of the clinic. In past studies z and t-tests were used to determine if a significant statistical difference existed between the aggregate model outputs and previous empirical observations of clinic operations (Lowery, Martin, 1992; Ledlow, 1996; Duray, 1998; Fay, 1998). Likewise, a z-test was utilized to determine if the total time until seen by a PCP and total time in clinic produced from the FCC Status Quo Models (Oct 99) had a statistically significant difference from empirical wait times for October 1999. Additionally a t-test was employed to determine if total patient visits produced from the FCC Status Quo Models (Oct 99) had a statistically significant difference from the total patient visits in the FCC in October 1999. Table 3 shows the results of these statistical validations. Similarly, a z-test was used to validate

the FCC Status Quo Models (FY99). The FY99 models' processes were based on the BAMC FCC Status Quo Models (Oct 99). The only variation in these models were that their arrival patterns were based on yearly data (FY99) instead of monthly data (Oct 99). The FY99 models were not validated on wait times because of lack of yearly wait time data. Appendix E demonstrates the processes and numbers utilized for all statistical validation results. The alpha level for statistical significance for these tests was .05. For validation purposes, there should not be a statistically significant difference between the empirical patient wait times and those obtained in the simulation models. From the results of these z/t-tests, and from conferring with Dr. Sauri, the modeler determined that there is no statistically significant or practical difference between the model and real patient wait times in the FCC.

Table 3: Validation Results of BAMC Status Quo Models (Oct 99)

PATIENT	MEAN		SAMPLI	E SIZE	RESULTS		
Total	Empirical	Model	Empirical	Model	Test		
In Clinic(time)	65.24	67.99	135	1382	1.22(z)	No statistically significant difference	
Waiting for  Provider(time)	21.44	18.19	146	1382	-0.074(z)	No statistically significant difference	
Patients	117	124.99	21	21	1.47(t)	No statistically significant difference	

Reliability is the ability of the model to consistently measure what it is designed to measure (Cooper, Schindler, 1998). Reliability looks at the variance of outputs produced from the model over time (Appendix D). The modeler ran the simulation for different iterations to determine the reliability of the model. Also the modeler changed the streams (sequences of independently cycling, random numbers used in conjunction with

distributions [ProModel®, 1998c]) of the model and compared the results of different streams with z-tests to establish reliability of the model (Appendix D). From the results of the z-tests the modeler determined that the BAMC FCC Status Quo Models were reliable.

#### **Ethical Considerations**

Confidentiality and privacy are significant considerations when performing healthcare research. The Privacy Act and other patient protection policies require extreme diligence. Throughout this study, patient information was examined. All patient information involved in this study was collected in aggregate and only summary statistics were presented. Anonymity of all participants (patients and interviewees) was protected and used only with expressed permission. Appropriate recognition and source quotes are provided in all cases.

### Model Experimentation, Analyses and Results

The model experimentation and analyses of results are provided to answer the objectives of this study: (1) describe the current system, (2) evaluate the impact of process and resource changes on patient wait times, access and resource utilization, and (3) design an improved system for the FCC (increased operational efficiency).

Efficiency, for this study, is defined as decreased patient total time in clinic, increased patient access (i.e. increased number of available appointments) and appropriate resource utilization. In order to accomplish these efficiencies, a review of current operations was completed.

#### **Current FCC System**

The average time a patient waits to see a provider and the overall patient time in the current FCC system are 24.8 and 80.59 minutes, respectively. The utilization of PCPs, LVNs and exam rooms are 78.54, 49.67 and 46.41 percent of available time, respectively. Appendix B provides FCC patient information and Table 4 summarizes the FY99 FCC utilization by patient category.

**Table 4: FY99 FCC Utilization** 

Enrollment Category	Category Number Enrolled		Utilization (Visits per year)
Tricare Prime	7,850	25,973	3.0308
Tricare Senior Prime	1,485	8,829	5.9495
Space A	0	7,396	4.0108
Active Duty	13	6	0.4615
Other Clinic	0	1,584	2.6893
TOTAL	9,348	43,788	3.9369

Note: Numbers based on end of FY99 Enrollment; therefore, patients may be enrolled during visit but not enrolled at end of FY99 and will be shown as Space A. Enrollment Data provided from Foundation Health. Visit Data provided from CHCS.

### Impact of Resource Changes

The modeler then examined some preliminary what-if (imagineering) factors that may effect patients access, wait time and resource utilization (Table 5).

Table 5: Simulation Factors Examined by the Modeler

- Number of Exam Rooms
- Number of Screeners (LVNs) and Providers
- Number of Appointments
- Various Combinations of Above

The actual number and type of what-if analysis performed was constantly adjusted as needed to achieve the study objectives. Table 6 describes the different models used in the

what-if analysis. What-if simulation outputs were tested for statistical significance (ztests) as well as overall practicality (decreased overall time in clinic and minimal resource consumption). As suggested by Gogg et. el. (1993) and Bateman et. el. (1997), overall analysis was designed to maximize the usefulness of the information produced from simulation runs while minimizing the effort. Table 7 lists the major statistical analyses performed for the status quo and what-if models.

Table 6: Description of Models Used in What-If Analysis

Models	Description
Alternative-One Models	Combine the FCC & APNC resources at the TMC (ten PCPs, two interns, twenty exam rooms, two receptionists, two 91Bs, two education nurses and one discharger) for 100% of FY99 FCC visits.
Alternative-Two Models	Replicate one team (six PCPs and one intern) with the support of the rest of the FCC resources (fifteen exam rooms, two receptionists, two 91Bs, two education nurses and one discharger) for 50% of FY99 FCC visits.
Alternative-Three Models	Replicate one team (six PCPs, one intern) with the support of the rest of the FCC resources (fifteen exam rooms, two receptionists, two 91Bs, two education nurses and one discharger) with no screening rooms (process changed to accomplish screenings in exam rooms) for 50% of FY99 FCC visits.
Alternative-Four Models	Combine the FCC & APNC resources at the TMC with no screening rooms (process changed to accomplish screenings in exam rooms) for 100% of FY99 FCC visits.

Note: For each model types two models were built. One model simulated Monday and Thursday extended day operations while the other model simulated Tuesday, Wednesday and Friday normal day operations. All models replicated current FCC staff shift schedules.

The BAMC leadership recently directed that the FCC and the APNC be combined. This decision led to the first what-if-analysis, which studied the effects of the consolidation of these clinics. The Alternative-One Models were developed to represent the new allocation of resources in the McWethy Troop Medical Clinic. Overall the Alternative-One Models show the combination of the FCC and the APNC will have a positive impact on efficiency with regard to patient wait times (Appendix D-6). The average time a patient waits for a PCP and the overall time in the clinic will decrease 4.52 and 7.24 minutes, respectively, from the current FCC system (Table 7).

Table 7: Summary of Statistical Analyses

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	Model	Oct99 FCC Status Quo Models	FY99 FCC Status Quo Models (Model Processes Based on Oct99 model with yearly patient load)	FY99 FCC Status Quo Models (Change in Streams)	FY99 FCC Status Quo Models (Change in # of Iterations)	Alternative-One Models [Directed Change]	Alternative-Two Models [Team Concept]	Alternative-Three Models [Process Change with a Team Concept]	Alternative-Four Models [Process Change]
Empirical (OCT) Total Wait Time to	5136	No Statistical Significant Difference Appendix D-1							
Empirical (OCT) Overall Time in Clinic		No Statistical Significant Difference Appendix D-1							
Empirical (Oct) Total Patient Visits		No Statistical Significant Difference Appendix D-1						·	
Empirical FY99 FCC Total Patient Visits			No Statistical Significant Difference Appendix	C.					
OCT99 FCC Status Quo Models Patients' Wait Time to See the PCP & Overall Time in Clinic				No Statistical Significant Difference Appendix D-4	No Statistical Significant Difference Appendix D-5				
FY99 FCC Status Quo Models Patients' Wait for PCP (Model processes based on Oct99 Model	with yearly patient todu		24.8			Positive Statistical Significant Difference (5.52 minute decrease in wait) Amendix D-6	Positive Statistical Significant Difference (10.36 minute decrease in wait) Annendix D-7	Negative Statistical Significant Difference (3.92 minute increase in wait) Appendix D-8	Negative Statistical Significant Difference (3.07 minute increase in wait)

Note: Level of Significance = .05; Patient Visits exclude telephone consults; Utilization percentages only account for utilization is models to replicate all activities.

Because the FCC staff was contemplating developing teams in the new FCC system, the modeler developed Alternative-Two Models to determine the effects of the team concept. This model replicated the work of only one team (six PCPs, one intern) with the support of the rest of the FCC resources (fifteen exam rooms, two receptionists, two 91Bs, two education nurses and one discharger). The Alternative-Two Models reveal the team concept will have a positive impact on efficiency in regards to patient wait times when compared to the current FCC system (Appendix D-7). The average time a patient waits for a PCP and the overall time in the clinic will decrease 10.36 and 7.13 minutes, respectively, from the current FCC system. However, the team concept does not improve the overall efficiency of the combined FCC/APNC, Alternative-One Models (Table 7).

To reiterate the terminal objective of this project was to determine resource levels and processes for the FCC that will improve efficiency. The modeler did some imagineering in an attempt to determine the optimal FCC structure. The modeler after discussion with PCPs developed the Alternative-Three Models that apply the same concepts as the Alternative-Two Models. However in the Alternative-Three Models, the present duties of the screeners (LVNs) changed to include preparing the patient for the PCPs in the exam rooms (enabling the PCPs to concentrate more on treating the patient and eliminating the use of a screening room for most patients). The Alternative-Three Models demonstrate that increasing the responsibilities of the LVNs will have a positive impact on efficiency in regards to patient wait times (Appendix D-8) when compared to the current FCC system. The average time a patient waits for a PCP and the overall time in the clinic will decrease 3.92 and 21.06 minutes, respectively, from the current FCC system. The Alternative-Three Models also improved efficiency in regards to wait times

when compared to the Alternative-One Models. The average overall time a patient is in the clinic will decrease 12.82 minutes from the combined FCC/APNC system (Appendix D-9). The Alternative-Three Models gained efficiency in patient time in the clinic would allow the FCC to increase appointments by at least 30% before the patient time in clinic would reach the same level as the proposed combined FCC/APNC system (Alternative-One Models). Even though the Alternative-Three Models system would allow the clinic to increase patient appointments, it may be impractical due to the additional staff required to support this team system with today's budgetary constraints.

Therefore, the Alternative-Four Models were designed to determine the true effects of changing the screening process without increasing staff requirements. These models are based on the processes of the Alternative-One Models except with the change in the screening process. The present duties of the screeners (LVNs) changed to include preparing the patient for the PCPs in the exam rooms (enabling the PCPs to concentrate more on treating the patient and eliminating the use of a screening room for most patients). The Alternative-Four Models demonstrate that increasing the responsibilities of the LVNs will have a positive impact on efficiency in regards to patient wait times when compared to the current FCC system (Table 7). The average overall time a patient is in the clinic will decrease 8.82 minutes from the current FCC system (Appendix D-10). However, increasing the responsibility of the LVNs does not significantly improve the overall efficiency of the combined FCC/APNC (Alternative-One Models) in respect to the total time in clinic, a decrease of only .82 minutes (Appendix D-11).

The Alternative-One Models and the Alternative-Four Models were further analyzed to determine if changing the number of PCPs, LVNs, exam rooms or the number of appointments would increase the efficiency of either system. Appendix E-1 not only confirms the conceptual inverse relationship between the individual number of PCPs, LVNs or exam rooms and the total time a patient spends in the clinic but also illustrates the patient generally spends less time in clinic with the Alternative-Four Models.

Appendix E-2 verifies the theoretical inverse relationship between the number of PCPs, LVNs or exam rooms and utilization of these resources. Appendix E-2 also demonstrates that Alternative-One Models have higher levels of PCPs utilization and lower levels of LVN and exam room utilization when compared to Alternative-Four Models.

Appendices E-3 and E-4 confirm the direct relationship between increasing the amount of appointments and total time a patient is in the clinic as well as utilization of resources.

Designing an Improved System (Optimization)

Because this study was designed to improve the access in the FCC (Figure 1), the modeler used MedModel SimRunner2!® to attempt to improve the access and efficiency of both models. SimRunner2!® conducts various what-if analyses to determine the best way to perform operations (i.e. optimization). SimRunner2!® enables the modeler to optimize multiple factors simultaneously (ProModel®, 1998b). Because the modeler desired to increase access to the FCC, the modeler ran optimizations on the Alternative-One Models and Alternative-Four Models with increased appointments from FY99 (110, 120 and 130%). The modeler used the same input factors that were studied individually in Appendix E (12-20 PCPs, 4-12 LVNs and 20-32 Exam Rooms), to determine the optimal combinations of these multiple factors (resources) to attain the desired

efficiencies. In order to maintain or preferably decrease the overall time the patient spent in the clinic, the modeler elected to minimize the average total time a patient is in the clinic as the optimization models' output. In order to accurately predict the objective function difference of 1.25 minutes with a statistical confidence level of 95 percent, the modeler ran 30 iterations of each potential combination of resources tested in SimRunner2!®. The modeler used Statistical Advantage, a component of SimRunner2!®, to determine the accuracy of SimRunner2!® objective function (average overall time a patient is in the clinic).

Table 8 summarizes the optimization results. The modeler determined the optimal solution from SimRunners2!® optimization results for each model by using the following practical significance criteria:

- (1) Acceptable results must have an overall patient time in clinic of less than 70.59 minutes (a ten-minute decrease in time from current FCC operations).
- (2) The lowest number of the PCPs utilized the better the solution (the most expensive resource).
- (3) The lowest number of LVNs and exam rooms with the lowest PCPs and an acceptable overall time in clinic patient is the optimal solution.

**Table 8: Optimization Results** 

	Time Patient is in the Clinic	# of PCPs/ Utilization	# of LVNs/ Utilization	# of Exam Rooms/ Utilization 20/50.46%					
Alternative-Four Models 1.1 Appendix F-1	66.27	12/68.79%	7/38.95%						
Alternative-One Models 1.1 Appendix F-1	69.86	14/65.26%	8/24.19%	26/29.43%					
Alternative-Four Models 1.2 Appendix F-2	70.52	12/74.49%	12/23.03%	21/54.55%					
Alternative-One Models 1.2 Appendix F-2	No Acceptable Results								
Alternative-Four Models 1.3 Appendix F-3	69.79	16/57.24%	12/24.72%	28/40.63%					
Alternative-One Models 1.3 Appendix F-3	No Acceptable Results								

Note: Acceptable results must have an overall average patient time in clinic < 70.59 minutes. Overall average patient time in clinic has a +/- variance of 1.25 minutes with a confidence level of 95%. 1.1, 1.2 and 1.3 refer to the models simulating 110%, 120%, 130% of FY99 FCC visits, respectively.

#### **Discussion**

#### Interpretation of Results

According to FCC PCP Time Study (2000), only 79% of a PCPs' time is available for any type of patient care; therefore, any increase in direct patient care and decrease in indirect patient care time is crucial. Even though desirable, a 100% utilization rate of PCPs is not practical. Literature states a utilization rate of 70-80% of available time for patient care is as good as one could expect (Dawson, Ulgen, O'Conner and Sanchez, 1994; Ditch, 1997). Because the models do not account for all indirect patient care (e.g. reading charts, coordinating with other providers, etc.), the modeler reduced available patient care time by 5% of the PCPs time for indirect patient care, decreasing the desired appropriate utilization in the FCC models for the PCPs to 65-75%. Even though the modeler desired to maintain an approximate 65-75% PCP utilization rate in all models,

the modeler was not able to achieve this rate with a 30% increase in patient visits in the Alternative-Four Models. However, the modeler still listed this scenario as a valid combination of resources due to the model's ability to increase visits by 30% and still decrease overall patient time in clinic by ten-minutes. Because the PCPs are the most expensive human resource, the appropriate LVN and exam room utilization rates were based on the highest rate that enabled the system to achieve a PCP utilization of 65-75%.

Table 9: Comparison of Optimization Models to Base Models

	FY99 FCC (Current)	Alternative- One Models (Directed Change)	Alternative- Four Models (Process Change)	Alternative- One Models 1.1	Alternative- Four Models 1.1	Alternative- Four Models 1.2	Alternative- Four Models 1.3
Average Daily Patient Census	146	146	146	161	161	175	190
Average Overall Time in Clinic	80.59	72.35	71.77	69.86	66.27	70.52	69.79
# of PCPs/ Utilization	11/76%	12/78%	12/66%	14/65%	12/69%	12/74%	16/57%
# of LVNs/ Utilization	4/50%	4/54%	4/69%	8/24%	7/39%	12/23%	12/25%
# of Exam Rooms/ Utilization	15/46%	20/43%	20/46%	26/29%	20/50%	21/55%	28/41%
Ratio of LVNs To PCPs	.36	.33	.33	.57	.58	1.0	.75
Ratio of Exam Rooms To PCPs	1.36	1.67	1.67	1.86	1.67	1.75	1.75

Note: Overall average patient time in clinic has a +/- variance of 1.25 minutes with a confidence level of 95%. 1.1, 1.2 and 1.3 refer to the models simulating 110%, 120%, 130% of FY99 FCC visits, respectively.

Table 9 compares the optimization models to base models. All models developed in this studied demonstrated the importance of having the appropriate amount and type of resources (i.e. PCPs and the appropriate ratio of exam rooms and LVNs to support the PCPs). The current FCC configuration has inappropriate resources to gain efficiency. Efficiency, for this study, was defined as decreased patient overall time in clinic, increased patient access (i.e. increased number of available appointments at the 110, 120 and 130% level) and appropriate resource utilization (65-75% of PCPs available time).

As seen in Table 9, additional PCPs and an appropriate number of exam rooms and LVNs supporting the PCPs are needed to gain optimal performance in the FCC. The BAMC leadership recently directed change of combining the FCC and the APNC will increase the number of PCPs and exam rooms which consequently will decrease the overall time a patient is in the FCC at McWethy Troop Medical Clinic. Nonetheless, to realize greater efficiencies (i.e. increasing the number of patients that the PCP can see as well as reduce the overall time a patient is in the clinic), the number of LVNs supporting the PCPs must also be increased. The FCC could gain even more efficiencies if the present duties of the screeners (LVNs) are changed to include preparing the patient in the exam rooms for the PCPs (enabling the PCPs to concentrate more on treating the patient and eliminating the use of a screening room for most patients).

Using the ratios listed in Table 9, the BAMC leadership has a method to determine the appropriate mix of resources to gain operational efficiency in the BAMC FCC with a constrained resource of PCPs, LVNs or exam rooms. For example, if the leadership wants to increase the FCC's capability up to 30% and changes the screening process but has a constrained resource of only fifteen PCPs available, the FCC would need twenty-five to twenty-six exam rooms and nine to fifteen LVNs (i.e. Exam Rooms = (# of PCPs) x (ratio of exam rooms to PCPs at a 10%-30% increase); LVNs = (# of PCPs) x (ratio of LVNs to PCPs at a 10%-30% increase)). Likewise if the constraining resource is the number of available exam rooms, the leadership can determine the appropriate amount of PCPs and LVNs (i.e. PCPs = (# of exam rooms) x ((ratio of exam rooms to PCPs at a 10%-30% increase)). LVNs to PCPs at a 10%-30% increase).

The results of optimization demonstrate when varying the combination of multiple resources (PCPs, LVNs and exam rooms) that the Alternative-Four Models are consistently more efficient than the Alternative-One Models (Appendix F). In all cases (110, 120 and 130% of FY99 FCC visits), the Alternative-Four Models used fewer PCPs to achieve an acceptable time in the clinic for the patient (Table 8). These models used the PCPs more efficiently because the process was changed to increase the responsibilities of the LVNs to include preparing the patient in the exam room for the PCPs. This change in process will enable the PCPs to use more of their time in direct patient care (actual examination of the patient) and less time in preparing the patient for the exam.

Under all the Alternative-Four Models (i.e. 1.1,1.2 and 1.3), the exam rooms would have to be equipped to enable LVNs to screen patients in them. With this additional equipment and only three additional LVNs, the Alternative-Four Models 1.1 demonstrate that changing the screening process would enable the FCC to have an average of fifteen more visits daily as well as decrease the overall time a patient is in the clinic by an average of fourteen minutes from the current FCC configuration.

One finding that emerged in the study albeit not via the project's design was that increasing the number of exam rooms does not necessarily increase the productivity of PCPs. The actual location of these rooms is more essential to productivity. Increasing the number of exam rooms not in the proximity to the provider can decrease the productivity of the provider as well as decrease the efficiency of the system. Therefore the location of resources used by the PCP are key for the productivity of the provider and the efficiency of the system.

## Presentation of Results

The modeler presented these results in a team fashion to key decision-makers and to personnel that may be affected by the results. In the presentations, the following was addressed with references to technical, operational and financial concerns: (1)

Restatement of the Project Objectives; (2) Problem Solved; (3) Project Methodology; (4)

Pros/Cons of Proposed Solution; and (5) Rejected Alternatives and Why (Gogg et. el., 1993).

## Conclusions & Recommendations

To reiterate, the present configuration cannot support optimal performance in the FCC. Specifically, the models developed identified the need for one to five additional PCPs, four to eight LVNs, and five to thirteen exam rooms depending on the target capability and processes selected (Table 9). The anticipated directed consolidation of the FCC and the APNC will provide only one PCP and five exam rooms. Therefore, to gain the delta in resources needed to achieve optimal performance in the FCC, the BAMC leadership needs to examine the possibility of allocating more resources to the FCC (i.e. PCPs, LVNs and exam rooms). Due to the military's present resource constrained environment, the BAMC leadership may need to redirect resources, initiate resource sharing agreements or limit enrollment in the FCC to gain efficiency.

As stated earlier, the terminal objectives of this project were to determine resource levels and processes for the FCC that will improve efficiency. Efficiency, for this study, was defined as decreased patient overall time in clinic, increased patient access (i.e. increased number of available appointments at the 110, 120 and 130% level) and appropriate resource utilization (65-75% of PCPs available time).

As anticipated, the study findings identified several methods to improve the operational efficiency of BAMC FCC, specifically in the areas of access, patient wait times and resource utilization. By implementing the proposed process and resource changes of the Alternative-Four Models, the FCC can increase patient visits up to 30%, decrease patient total time in clinic by ten-minutes and increase PCPs' direct patient care utilization. In turn these resources and process changes are anticipated to improve the satisfaction of patients with BAMC FCC.

Before this study, BAMC did not have any standard management tool to determine the effect of changes of resource allocation in the FCC. The computer simulation models developed in this study will allow the BAMC executive leadership to evaluate future proposed changes in the clinic in a less expensive, less disruptive and more timely manner. Recommend that these models be used to further analyze the effect of increasing the number of exam rooms and to evaluate other proposed process changes to increase the use of PCPs for direct patient care as well as increase LVNs' responsibilities in the clinic. Likewise the procedures in this study can be used as a guide for completion of future studies of a similar nature in other BAMC TRICARE primary care clinics.

Overall, recommend BAMC leadership continue to support the use of computer simulation analysis. The ability of computer simulation to do "what-if" analyses without disrupting present processes and resources is invaluable. However, simulation is a resource intensive process that cannot be accomplished in a haphazard fashion. To effectively use computer simulation as a management decision-making tool, appropriate resources in the form of trained modelers, as well as allocation of time must be specifically provided to the project under study. Additionally, strongly recommend that

Computer Simulation: BAMC FCC 33

individuals selected for training should be available to conduct simulation studies as a primary duty.

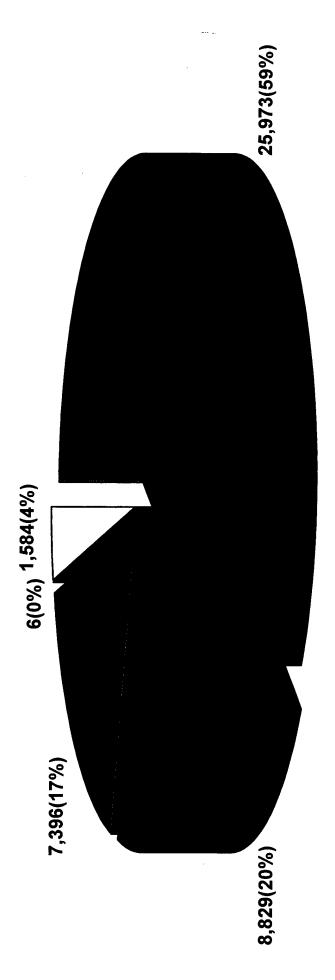
## FCC Time Study Sheet

DATE: Time Registration: Starts Ends	Time Screening: Starts Ends	Time Provider Visit:Starts Ends	Time Discharge/Check-Out:Starts Ends
Provider Type of Appointm Time Potient Arriv			

## Input Variables Input Flow Timing Sheet

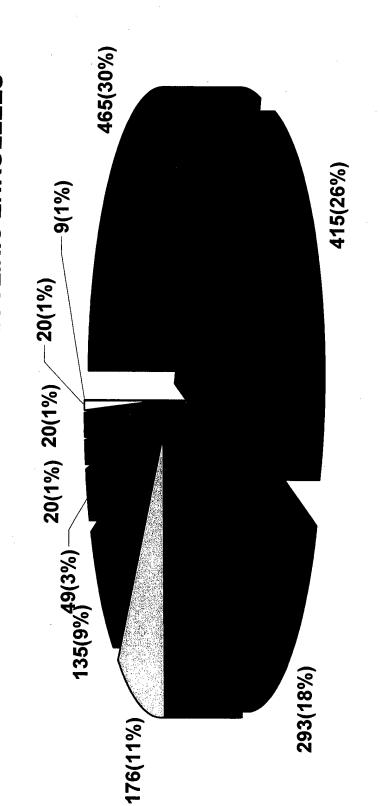
Time Screening Ends	Saw Saw Nurse/Phar Nurse/Phar/ /Xray/Lab Xray/Lab Before After
Time 1ST Wait Screening Time Starts	Saw Nurse/Phar /Xray/Lab Before
1ST Wait Time	Total Time
Reg Time	Time See PCP Late
Time Ends	Discharge
Time Registration Starts	Time Check Discharge Out Ends Time
Time Before Appoint	Time Check Out Starts
Time	PCP Time
Appointment Type	Time PCP Visit Ends
PCPs	Time PCP Visit Starts
#	2ND Wait
Date	Screening Time

## **TOTAL FY99 FCC VISITS**



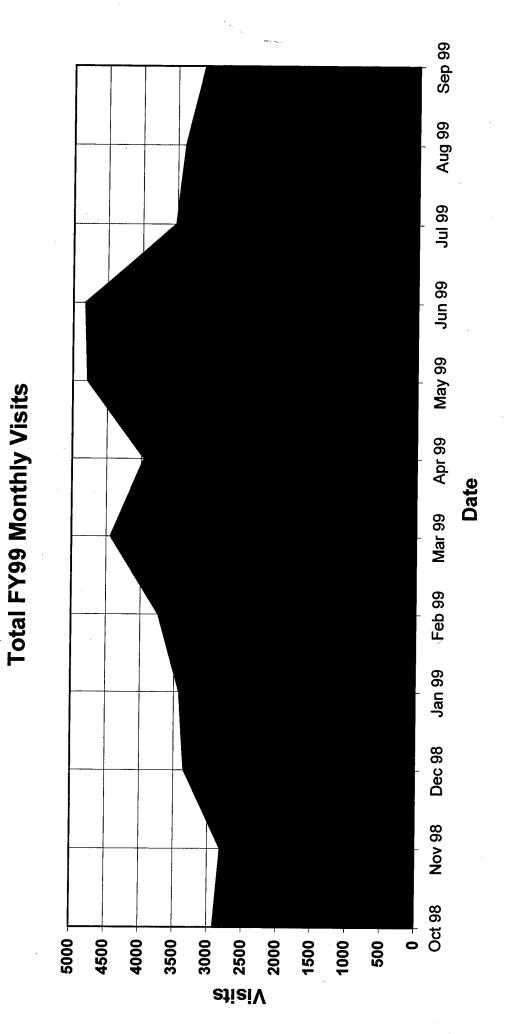
☐ Other Cinics ■Tricare Prime ■Tricare Senior Prime ■SPACE A ■Active Duty

# **TOTAL FY99 FCC VISITS BY OTHER CLINIC ENROLLEES**

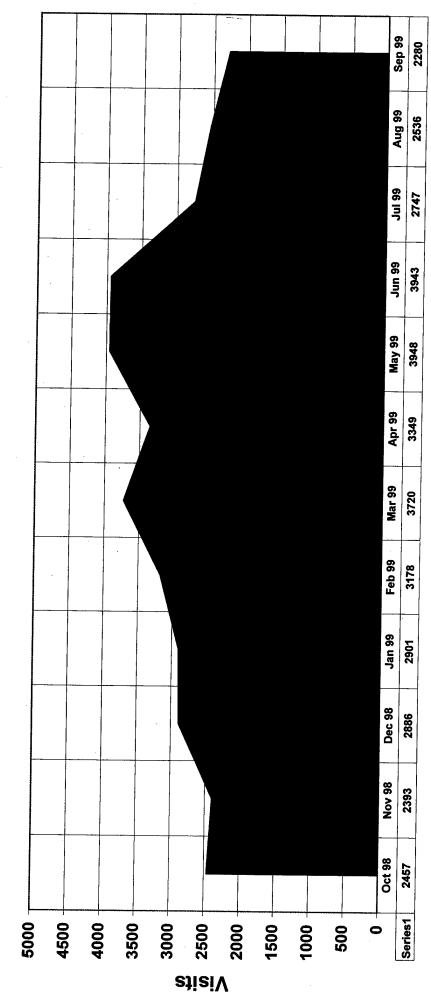




APPRENDIX B-2

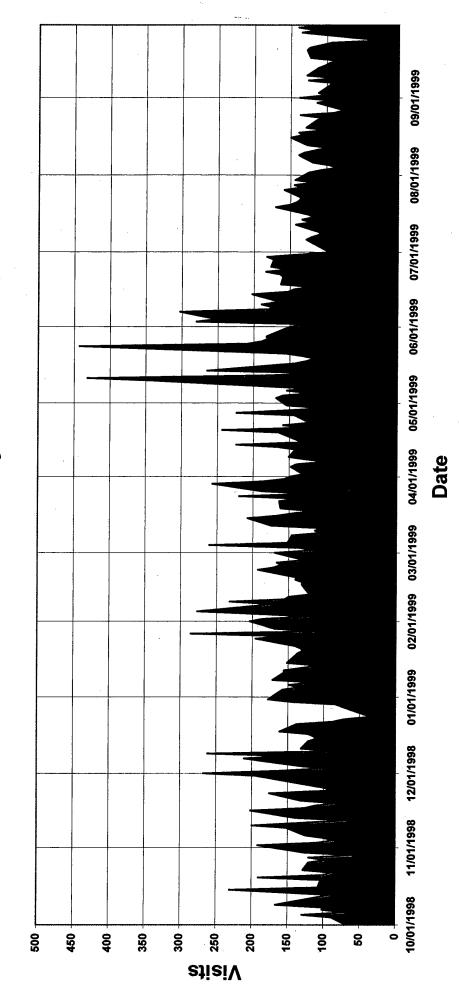


FY99 Monthly Visits without Telephone Consults

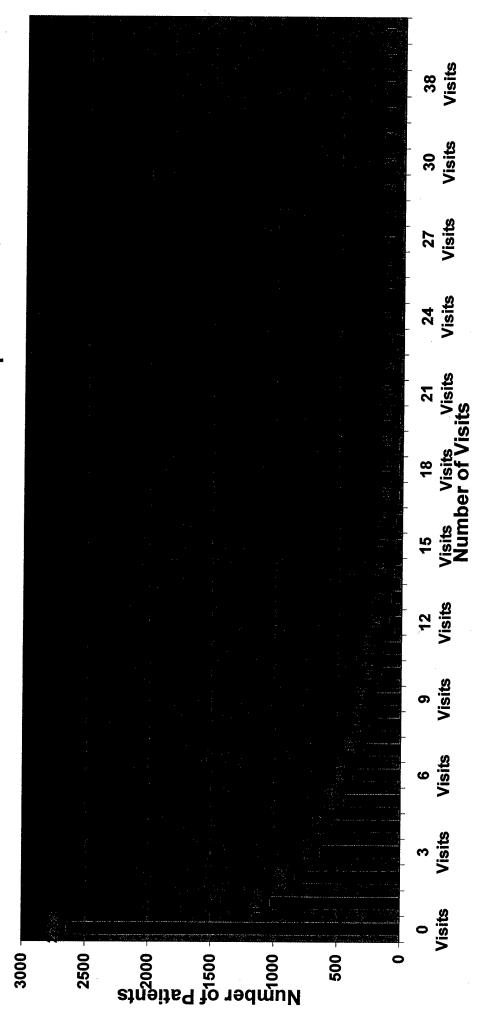


Date

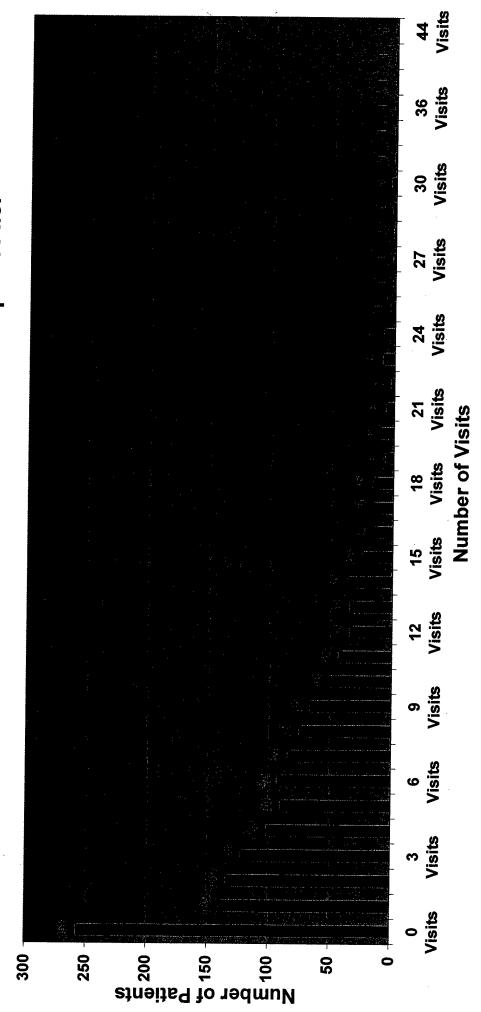
## **Total FY99 Daily Visits**



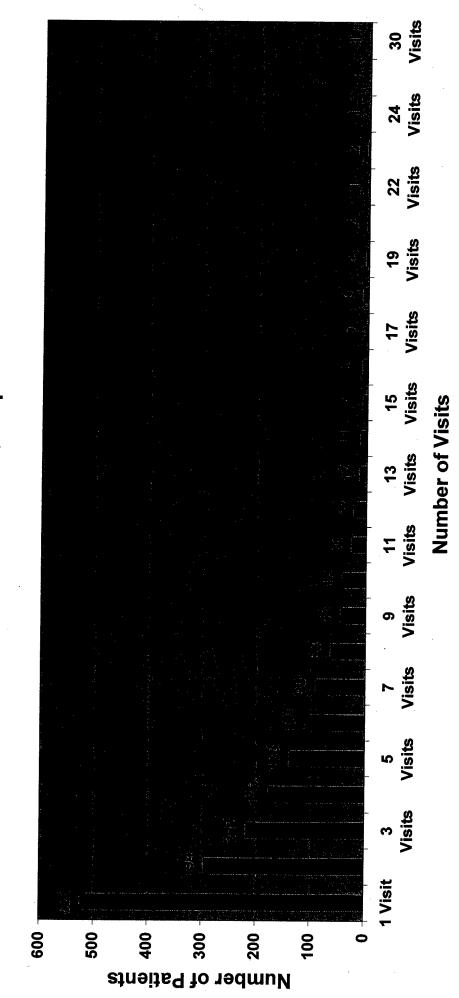
FY99 FCC TRICARE PRIME Visits-Frequent Fliers



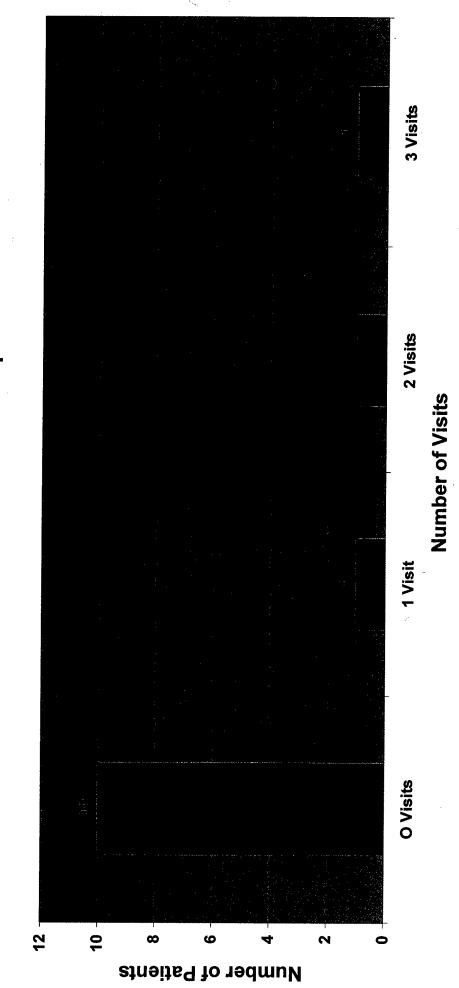
FY99 FCC TRICARE SENIOR PRIME Visits-Frequent Flier



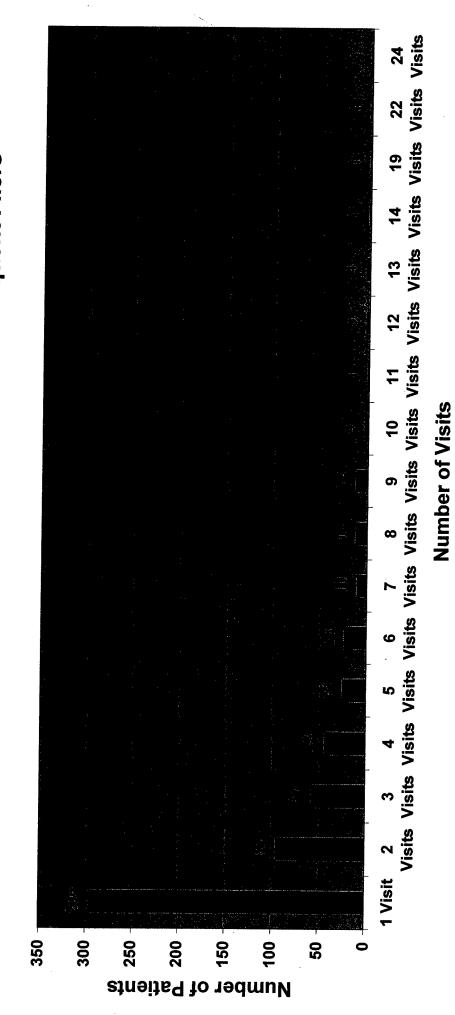
FY99 FCC SPACE A Visits-Frequent Fliers

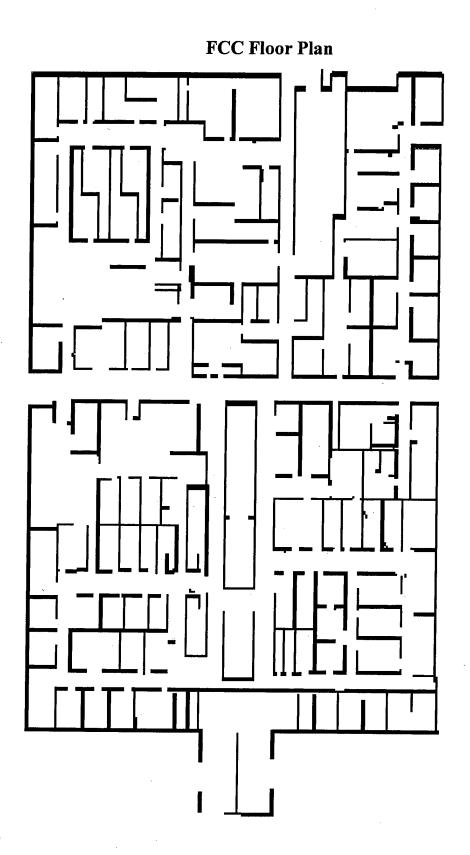


FY99 FCC ACTIVE DUTY Visits - Frequent Fliers



FY99 FCC Visits By OTHER CLINIC ENROLLEES-Frequent Fliers





APPENDIX C

## **Statistical Analyses**

Note: All statistical analysis numbers came directly from empirical time study data and MedModel® output numbers except for standard deviation numbers. Standard deviation numbers provided in MedModel® output are the standard deviation of the mean of each of the iterations. To determine a safe estimate of the standard deviations of the whole population, the modeler applied The Empirical Rule.

The Empirical Rule for distributions that are generally bell shaped is that:

About 68 percent of all data items lie within 1 standard deviation of the mean.

About 95 percent of all data lie within 2 standard deviation of the mean.

About 99.7 percent of all data lie within 3 standard deviation of the mean.

(Sanders, 1995)

The modeler used the maximum and minimum numbers provided in a MedModel® output and applied the empirical rule to determine a safe estimate of the standard deviation of MedModel® runs (e.g. (199.11-2.12)/6=32.83 the standard deviation of FCC Status Quo(M/Th).

## Validation of Oct 99 Status Quo Models to Empirical Data (wait times)

TIME PATIEN					
WAITS TO BE	·朴奇(76)郑廷(Therefore)郑政安等第				
EXAMED	M/TH	T/W/F	MONTH(OCT)		
MEAN	17.84	18.41	18:19		
MEDIAN	16.97	16.59	16.73		
MIN	2.12	2.34	10.73 2.12		
MAX	199.11	136.72	2.12 199.11		
STD DEV	32.83	22.40	32.83		
95% CI LOW	· 医结核体质的有效检查检验系统的对应性检验等。	15.1	32.63 15.06		
95% CI HIGH	나 되었다. 그 중에 없었습니다 하는데 이렇게	21.73	21.33		
SAMPLE SIZE	年 机加工环联合摇车 法有效法 自转反对	1606	2625		
TIME PATIENT					
MEAN	66.58	68.86	67.99		
MEDIAN	65.47	65.77	65.66		
MIN	18.12	18.61	18.12		
MAX	246.79	259.45	259.45		
STD DEV	38.11	40:14	40.22		
95% CI LOW	表的"Entraded"是1965年的特殊。	62:35	61.85		
95% CI HIGH	72.11	75.38	74.13		
SAMPLE SIZE	1019	1606	2625		
	Ho= There is no si	gnificant difference between the		tal time a natient waits to s	pe a F
EXAMED  Level of Significance	H1= A significant of the mean of the O	lifference exist between the me of 99 FCC Status Quo Models' t	an of the emperical total tir otal time a patient waits to	ne a patient waits to see a see a PCP.	PCP
.05		나는 사용 아들은 이번 가는 그릇들이 나왔다. 그렇게 살아들이 없는 것은 없었다.			11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
<ul> <li>9 400 M. a. 74.</li> </ul>			YULUK MENANGKETAN KANTAK TUR		
		OBSERV	,05 SIG =Z=+ OR -1.96	Z-TEST	
18.19	MEAN	OBSERV 21.4384		Z-TEST	
16.73	MEDIAN			Z-TEST  EMPERICAL MODE	L
16.73 32.83	MEDIAN STD DEV	21.438			<i>à 18</i> 983
16.73 32.83 15.06	MEDIAN STD DEV 95% CI LOW	21.438	( I SAMPLE SIZE MEAN	EMPERICAL MODE	2
16.73 32.83 15.06 _21.33	MEDIAN STD DEV 95% CI LOW 95% CI HIGH	21 438 52.472	\$ \$ SAMPLE SIZE MEAN STD DEV	EMPERICAL MODEL 146	2 18
16.73 32.83 15.06	MEDIAN STD DEV 95% CI LOW	21.438	\$ \$ SAMPLE SIZE MEAN STD DEV 3	EMPERICAL MODEI 146 21.44 52.47	2 18
16.73 32.83 15.06 _21.33	MEDIAN STD DEV 95% CI LOW 95% CI HIGH	21 438 52.472	SAMPLE SIZE MEAN STD DEV TR:	EMPERICAL MODEI 146 21.44 52.47 = -0.74	2 18
16.73 32.83 15.06 _21.33	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE	21 438 52.472 146	I I SAMPLE SIZE MEAN STO DEV ) TR:	EMPERICAL MODEI 146 21.44 52.47 = -0.74 Fall To Reject Ho	2 18 32
16.73 32.83 15.06 21.33 2625	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no sig	21 438 52.4724 146 gnificant difference between the	SAMPLE SIZE  MEAN  STD DEV  TR:	EMPERICAL MODE! 146 21.44 52.47 = -0.74 Fall To Reject Ho al time a patient is in the Fo	2 18 32
16.73 32.83 15.06 21.33 2625	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no sig	21 438 52.472 146	SAMPLE SIZE  MEAN  STD DEV  TR:	EMPERICAL MODE! 146 21.44 52.47 = -0.74 Fall To Reject Ho al time a patient is in the Fo	2 18 32
16.73 32.83 15.06 .21.33 2625 IME PATIENT IN SYSTEM	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no sign the mean of the Och	21 438 52.4724 146 gnificant difference between the	SAMPLE SIZE MEAN STD DEV TR: mean of the emperical tot otal time a patientis in the o	EMPERICAL MODEI 146 21.44 52.47  = -0.74  Fall To Reject Ho al time a patient is in the Folinic.	2 16 32 CC ar
16.73 32.83 15.06 .21.33 2625 IME PATIENT IN SYSTEM Level of Significance	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no sign the mean of the Och	21 438 52 4724 146 gnificant difference between the tt 99 FCC Status Quo Models' t	SAMPLE SIZE MEAN STD DEV TR: mean of the emperical tot otal time a patientis in the o	EMPERICAL MODEI 146 21.44 52.47  = -0.74  Fall To Reject Ho al time a patient is in the Folinic.  ne a patient is in the FCC a c.	29 18 32 CC ar
16.73 32.83 15.06 .21.33 2625 IME PATIENT IN SYSTEM Level of Significance	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no sign the mean of the Och	21.438 52.472 146 gnificant difference between the st 99 FCC Status Quo Models' to difference exist between the mea of FCC Status Quo Models' total	SAMPLE SIZE MEAN STD DEV TR: mean of the emperical tot otal time a patientis in the country time a patient is in the clini .05 SIG =Z=+ OR -1.96	EMPERICAL MODEI 146 21.44 52.47  = -0.74  Fall To Reject Ho al time a patient is in the Folinic.	29 18 32 CC ar
16.73 32.83 15.06 .21.33 2625 IME PATIENT IN SYSTEM Level of Significance .05	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no sig the mean of the Oct H1= A significant d mean of the Oct 98	21 438 52 472 146 gnificant difference between the st 99 FCC Status Quo Models' to difference exist between the mea FCC Status Quo Models' total OBSERV	SAMPLE SIZE MEAN STD DEV TR: mean of the emperical tot otal time a patientis in the country time a patient is in the clini .05 SIG =Z=+ OR -1.96	EMPERICAL MODE)  146 21.44 52.47  = -0.74  Fall To Reject Ho al time a patient is in the Footinic.  The a patient is in the Footinic.  The a patient is in the Footinic.	218 18 32 CC ar
16.73 32.83 15.06 .21.33 .2625  IME PATIENT IN SYSTEM  Level of Significance .05 67.99	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sig the mean of the Oct H1= A significant d mean of the Oct 98	21 438- 52 472- 146 gnificant difference between the st 99 FCC Status Quo Models' to difference exist between the mea of FCC Status Quo Models' total CBSERV 65 2444	SAMPLE SIZE MEAN STD DEV TR: mean of the emperical tot otal time a patientis in the country time a patient is in the clini .05 SIG =Z=+ OR -1.96	EMPERICAL MODE:  146 21.44 52.47  = -0.74  Fall To Reject Ho al time a patient is in the FC clinic.  ne a patient is in the FCC a c.  Z-TEST  EMPERICAL MODEL	20 18 32 32 32 32 32
16.73 32.83 15.06 .21.33 .2625  IME PATIENT IN SYSTEM  Level of Significance .05 67.99 65.66	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant of the Oct H1= A significant of mean of the Oct 98  MEAN MEDIAN	21 438- 52 472- 146 gnificant difference between the st 99 FCC Status Quo Models' to difference exist between the mea of FCC Status Quo Models' total CBSERV 65 2444	SAMPLE SIZE MEAN STD DEV TR: mean of the emperical tot otal time a patientis in the clini time a patient is in the clini .05 SIG =Z=+ OR -1.96	EMPERICAL MODE:  146 21.44 52.47  = -0.74  Fall To Reject Ho al time a patient is in the FC clinic.  ne a patient is in the FCC a c.  Z-TEST  EMPERICAL MODEL 135	20 18 32 32 CCC arm and the
16.73 32.83 15.06 .21.33 .2625  IME PATIENT IN SYSTEM  Level of Significance .05 67.99 65.66 40.22	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant of the Oct H1= A significant of mean of the Oct 98  MEAN MEDIAN STD DEV	21 438- 52 472- 146 gnificant difference between the st 99 FCC Status Quo Models' to difference exist between the mea of FCC Status Quo Models' total CBSERV 65 2444	SAMPLE SIZE  MEAN  STD DEV  TR:  mean of the emperical total time a patient is in the clini  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE	EMPERICAL MODE)  146 21.44 52.47  = -0.74  Fall To Reject Ho al time a patient is in the FC clinic.  ne a patient is in the FCC a c.  Z-TEST  EMPERICAL MODEL 135 65.24	20 18 32 32 CCC ar and the 26 67
16.73 32.83 15.06 .21.33 .2625  IME PATIENT IN SYSTEM  Level of Significance .05 67.99 65.66 40.22 61.85	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant of the Oct H1= A significant of the Oct MEAN MEDIAN STD DEV 95% CI LOW	21 438- 52 472- 146 gnificant difference between the st 99 FCC Status Quo Models' to difference exist between the mea of FCC Status Quo Models' total CBSERV 65 2444	SAMPLE SIZE MEAN STD DEV TR: mean of the emperical tot otal time a patient is in the clini .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV	EMPERICAL MODE:  146 21.44 52.47  = -0.74  Fall To Reject Ho al time a patient is in the FC clinic.  ne a patient is in the FCC a c.  Z-TEST  EMPERICAL MODEL 135	20 18 32 CC ar
16.73 32.83 15.06 .21.33 .2625  IME PATIENT IN SYSTEM  Level of Significance .05 67.99 65.66 40.22 61.85 74.13	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign the mean of the Oct H1= A significant domean of the Oct 98  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	21.438/ 52.472/ 14/ prificant difference between the st 99 FCC Status Quo Models' to difference exist between the mea FCC Status Quo Models' total OBSERV 65.2444 24.619	SAMPLE SIZE MEAN STD DEV TR: mean of the emperical total time a patient is in the clini .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV	EMPERICAL MODE)  146 21.44 52.47  = -0.74  Fall To Reject Ho al time a patient is in the FC clinic.  ne a patient is in the FCC a c.  Z-TEST  EMPERICAL MODEL 135 65.24	20 18 32 32 CCC arr and the 20 67

## Validation of Oct 99 Status Quo Models to Empirical Data (total patients)

OTAL PATIENT VISIT SS T-CONS FOR O	1966年1962年1月1日日本日本			
99	MTH	TM/F	MONTH(OCT)	Emperical (OCT)
MEAN	127.37	123.53	124.99	117
MEDIAN	126.5	123	124.33	
MIN	103	105	103.00	
MAX	153	154	154.00	
STD DEV	14.53	12.953	8.50	40.95
95% CI LOW	115.22	115.71	115.52	
95% CI HIGH	139.52	131.36	134.47	
SAMPLE SIZE	8	13	21.00	21
F-test	TR of 4.73 is >2	2.46		
	Ho≒There is no 1999 and the m 10).	significant dif ean of the Oc	ference between the mean of the en t 99 FCC Status Quo Models' total p	nperical total patients In Oct atients in October 1999 (wit
	H1=There is a s 1999 and the m 10).	significant diffe ean of the Oct	erence between the mean of the empt 199 FCC Status Quo Models' total p	perical total patients in Octo atients in October 1999 (wit
n Pi	= 27.9598548	34 t.025=	2.0518	
		いいかがた むいがりをすて		
TI	e 1.47617558	5 TR of 1.470	6 is < t.025 of 2.0518; Fail to Rejec	t Ho

## Validation of FY99 Status Quo Models to Empirical Data (total patients)

表本。2019年20日初初4月20日		和自己的學校學 医多种腺样的	TR= 0.13	的方式的影響的
SAMPLE SIZE	249			
95% CI HIGH		있는 경영, 경우리 반경을 보다는 경우를 받는데 모든 다음을		10.5
95% CI LOW		MEAN		24 145.5
	52.68	SAMPLE SIZE		24
MEDIAN			Emperical	FY99 Statu Quo Mode
MEAN	OBSER 145.9	\.05 SIG =Z=+ OR -1.96	Z-TEST	
and the mean o	TINE FY99 FCC	Status Quo Models' total	patients in FY99.	
H1=There is a s	ignificant differe	nce between the mean o	f the emperical to	tal patients
FY99 and the m	nean of the FY99	FCC Status Quo Model	s' total patients in	FY99.
Ho=There is no			of the emperical t	otal nationte
100	149	, 7, 0, 249		
148.06				
tiliti i vili Malakava sa				
YAKER AMAN DIRAKTIN BIRKER				
科學學的特殊學院 医阿拉克氏试验	Brakera Propinsky versky			
\$P\$\$P\$自然的现在分词				
	성영영연구원공화, 시작 등은 경찰학	경영 없었다. 이번 사람들은 사람들은 사람들이 없다.		
医乳状病 化多次混合物 医多氏性	TANE	EVON		
	100 Ho=There is no FY99 and the m H1=There is a s	M/TH T/W/F  145.7 145.37  144 146.00  123 114.00  177 175.00  11.57 12.09  143.33 143.34  148.06 147.40  100 149  Ho=There is no significant difference of the FY99 and the mean of the FY99  H1=There is a significant difference of the FY99 FCC  OBSER  MEAN OBSER  MEDIAN  STD DEV 52.68  95% CI LOW  95% CI HIGH	M/TH T/W/F FY99  145.7 145.37 145.50  144 146.00 145.20  123 114.00 114.00  177 175.00 177.00  11.57 12.09 10.50  143.33 143.34 143.34  148.06 147.40 147.67  100 149 249  Ho=There is no significant difference between the mean FY99 and the mean of the FY99 FCC Status Quo Models  H1=There is a significant difference between the mean of and the mean of the FY99 FCC Status Quo Models total  OBSER 0.5 SIG = Z=+ OR -1.96  MEAN 145.9  MEDIAN  STD DEV 52.68 SAMPLE SIZE  95% CI LOW MEAN  95% CI LOW MEAN  95% CI HIGH STD DEV  SAMPLE SIZE 249	M/TH       T/W/F       FY99         145.7       145.37       145.50         144       146.00       145.20         123       114.00       114.00         177       175.00       177.00         11.57       12.09       10.50         143.33       143.34       143.34         148.06       147.40       147.67         100       149       249         Ho=There is no significant difference between the mean of the emperical to rand the mean of the FY99 FCC Status Quo Models' total patients in         H1=There is a significant difference between the mean of the emperical to and the mean of the FY99 FCC Status Quo Models' total patients in FY99.         MEDIAN       OBSER\ .05 SIG =Z=+ OR -1.96       Z-TEST         MEDIAN       Emperical         STD DEV       52.68       SAMPLE SIZE       249         95% CI LOW       MEAN       145.94         95% CI HIGH       STD DEV       52.68         SAMPLE SIZE       249

Reliability of FY99 Status Ouo Model (Different Random Seeds)

ea chin aterito andiexist M. You		with the part of the Albert Charles and the Great Control of the Great C	Mara (15 de l'Octobro (6 de l'Arco) e		
TIME PATIENT					
WAITS TO BE					
EXAMED			M/TH		
MEAN			17.55		
MEDIAN			16.86		
MIN			2.81		
MAX			152.42		
STD DEV			24.94		
95% CI LOW			14.77		
95% CI HIGH			20.33		
SAMPLE SIZE			20.33 948		
TIME PATIENT IN			940		
성을 하는 사람들은 경기를 가고 있다.					
CLINIC					
MEAN			67.24		
MEDIAN			65.47		
MIN			21.59		
MAX	等的主要的特殊的是可能		246.34		
STD DEV			37.46		
95% CI LOW			61.62		
95% CI HIGH			72.85		e de Marchine
SAMPLÉ SIZE		ant difference between th	948		
TIME PATIENT WAITS TO BE	(Monday & Thursday w	ith one set of seeds) total uo Model's (Monday & Ti	time a patient waits	s to see a PCP a	nd the mean o
EXAMED	patient waits to see a P H1= A significant differe	CP. ence exist between the m	ean of the FY99 FC	C Status CouMo	odeľs (Monday
그는 지금 중점되다. 경기대학교 다	patient waits to see a P H1= A significant different Thursday with one set of FCC Status Qou Model	CP.	ean of the FY99 FC	C Status QouMo	odel's (Monday n of the FY99
EXAMED  Level of Significance .05	patient waits to see a P H1= A significant difference of the set of the set of the set of the see a PCP.	CP. ence exist between the m if seeds) total time a patie 's (Monday & Thursday w MODEL(8)	ean of the FY99 FC	C Status QouMc CP and the mea eeds) total time a	odel's (Monday n of the FY99
EXAMED  Level of Significance .05	patient waits to see a P H1= A significant difference of the set of the set of the set of the see a PCP.	CP. ence exist between the m if seeds) total time a patie s (Monday & Thursday w	ean of the FY99 FC int waits to see a Pi ith another set of se	C Status QouMc CP and the mea eeds) total time a	odel's (Monday n of the FY99
EXAMED  Level of Significance .05  17.55 16.86	patient waits to see a P H1= A significant difference of the set of the set of the see a PCP.  MEAN MEDIAN	CP.  price exist between the multi- if seeds) total time a patie is (Monday & Thursday w  MODEL(8)  17.84	ean of the FY99 FC int waits to see a Pi ith another set of se .05 SIG =Z=+ OI	C Status QouMc CP and the mea eeds) total time a	odel's (Monday n of the FY99 i patient waits t
EXAMED  Level of Significance05  17.55 16.86 24.94	patient waits to see a P H1= A significant differe Thursday with one set of FCC Status Qou Model see a PCP.  MEAN MEDIAN STD DEV	CP. ence exist between the m if seeds) total time a patie 's (Monday & Thursday w MODEL(8)	ean of the FY99 FC int waits to see a Pi ith another set of se	C Status QouMo CP and the mea seds) total time a Z-TEST	odel's (Monday n of the FY99 i patient waits (
EXAMED  Level of Significance :05  17.55 16.86 24.94 14.77	patient waits to see a P H1= A significant difference of the see o	CP.  price exist between the multi- if seeds) total time a patie is (Monday & Thursday w  MODEL(8)  17.84	ean of the FY99 FC int waits to see a Pi ith another set of se .05 SIG =Z=+ OI	C Status QouMo CP and the mea seds) total time a Z-TEST MODEL(8)	odel's (Monday n of the FY99 n patient waits t MODEL(s8)
EXAMED  Level of Significance :05  17.55 16.86 24.94 14.77 20.33	patient waits to see a P H1= A significant difference of the see a PCP.  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	CP. Price exist between the multi- if seeds) total time a patie is (Monday & Thursday w  MODEL(8)  17.84  32.83	ean of the FY99 FC int waits to see a Pi ith another set of se .05 SIG =Z=+ OI SAMPLE SIZE	C Status QouMo CP and the mea seds) total time a Z-TEST MODEL(8) 1019	odel's (Monday n of the FY99 patient waits to MODEL(s8) 948
EXAMED  Level of Significance :05  17.55 16.86 24.94 14.77	patient waits to see a P H1= A significant difference of the see o	CP.  price exist between the multi- if seeds) total time a patie is (Monday & Thursday w  MODEL(8)  17.84	ean of the FY99 FC int waits to see a Pi ith another set of se .05 SIG =Z=+ OI SAMPLE SIZE MEAN	C Status QouMo CP and the mea seds) total time a Z-TEST MODEL(8) 1019 17.84	odel's (Monday n of the FY99 patient waits t MODEL(s8) 948 17.55
EXAMED  Level of Significance :05  17.55 16.86 24.94 14.77 20.33	patient waits to see a P H1= A significant difference of the see a PCP.  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	CP. Price exist between the multi- if seeds) total time a patie is (Monday & Thursday w  MODEL(8)  17.84  32.83	ean of the FY99 FC int waits to see a Pi ith another set of se .05 SIG =Z=+ QI  SAMPLE SIZE MEAN STD DEV  TR=	C Status QouMo CP and the mea seds) total time a Z-TEST MODEL(8) 1019 17.84 32.83	odel's (Monday n of the FY99 patient waits t MODEL(s8) 948 17.55
EXAMED  Level of Significance :05  17.55 16.86 24.94 14.77 20.33	patient waits to see a P H1= A significant difference of the see a PCP.  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE	CP. Ince exist between the multiseds) total time a patie (S. (Monday & Thursday w	ean of the FY99 FC int waits to see a Prith another set of se .05 SIG =Z=+ OI SAMPLE SIZE MEAN STD DEV TR= Fa	C Status QouMcCP and the measeds) total time a Z-TEST  MODEL(8) 1019 17.84 32.83  0.22 III To Reject Ho	MODEL(88) 948 17.55 24.94
EXAMED  Level of Significance :05  17.55 16.86 24.94 14.77 20.33 948	patient waits to see a P H1= A significant difference of the see a PCP MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no signific (Monday & Thursday with one as PCP)	CP. Price exist between the mile seeds) total time a patie S (Monday & Thursday w MODEL(8) 17.84 32.83	ean of the FY99 FC int waits to see a Pi ith another set of se .05 SIG =Z=+ OI  SAMPLE SIZE MEAN STD DEV  TR= Fa e mean of the FY99 time a patient is in t	C Status QouMo CP and the meal seds) total time a Z-TEST  MODEL(8) 1019 17.84 32.83  0.22 III To Reject Ho D FCC Status Qo the FCC and the	odel's (Monday n of the FY99 n patient waits t MODEL(s8, 948, 17:55, 24:94
EXAMED  Level of Significance :05  17.55 16.86 24.94 14.77 20.33 948  FIME PATIENT IN SYSTEM	patient waits to see a P H1= A significant difference of the see a PCP MEAN MEDIAN STD DEV 95% CI LOW 95% CI LOW 95% CI HIGH SAMPLE SIZE H0= There is no signific (Monday & Thursday with FY99 FCC Status Qou in the clinic. H1= A significant difference of thursday with one set of	CP.  Ince exist between the miniseeds) total time a patie is (Monday & Thursday with MODEL(8)  17.84  32.83  1019  ant difference between the thone set of seeds) total Model's (Monday & Thursday with miniseeds) total ince exist between the me if seeds) total time a patie	ean of the FY99 FC int waits to see a Pi ith another set of se  .05 SIG =Z=+ OI  SAMPLE SIZE MEAN STD DEV  TR= Ea e mean of the FY99 time a patient is in the day with another se ean of the FY99 FC int is in the FCC and	C Status QouMo CP and the meal eds) total time a Z-TEST  MODEL(8) 1019 17.84 32.83  0.22 III To Reject Ho D FCC Status Qou the FCC and the t of seeds) total C Status Qou Mo d the mean of the	wdel's (Monday n of the FY99 n patient waits the MODEL(s8 948 17.55 24.94 wu Model's mean of the time a patient i
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EXAMED  Level of Significance .05  17.55 .16.86 .24.94 .14.77 .20.33 .948  FIME PATIENT IN SYSTEM  Level of Significance .05 .67.24 .65.47	patient waits to see a P H1= A significant difference of the see a PCP  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no signific (Monday & Thursday with Y99 FCC Status Qoullin the clinic.)  H1= A significant difference of the set of Status Qoulling Mean MEAN MEDIAN	CP. Ince exist between the milit seeds) total time a patie is (Monday & Thursday with an ince exist between the mass of seeds) total Model's (Monday & Thursday & Thursday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds).	ean of the FY99 FC int waits to see a Property of the another set of see  .05 SIG =Z=+ OI  SAMPLE SIZE MEAN STD DEV  TR= Fa e mean of the FY99 time a patient is in the day with another see an of the FY99 FC int is in the FCC and other set of seeds)  .05 SIG =Z=+ OI2	C Status QouMcCP and the measeds) total time a Z-TEST  MODEL(8) 1019 17.84 32.83  0.22 III To Reject Ho D FCC Status Qounce to fee Seeds) total C Status Qou Mcd the mean of the total time a patie Z-TEST  MODEL(8)	odel's (Monday n of the FY99 n patient waits MODEL(s8 948 17:55 24:94 ou Model's mean of the time a patient odel's (Monday e FY99 FCC nt is in the clin
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EXAMED  Level of Significance .05  17.55 16.86 24.94 14.77 20.33 948  IME PATIENT IN SYSTEM  Level of Significance .05  67.24 65.47 37.46 61.62	patient waits to see a P H1= A significant difference of the part	CP. Ince exist between the milit seeds) total time a patie is (Monday & Thursday with an ince exist between the mass of seeds) total Model's (Monday & Thursday & Thursday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds).	ean of the FY99 FC int waits to see a Pi ith another set of se  .05 SIG =Z=+ OI  SAMPLE SIZE MEAN STD DEV  TR= Fa e mean of the FY99 time a patient is in the day with another se an of the FY99 FC int is in the FCC and other set of seeds)  .05 SIG =Z=+ OI;  SAMPLE SIZE MEAN	C Status QouMcCP and the mean seeds) total time a Z-TEST  MODEL(8) 1019 17.84 32.83  0.22 iii To Reject Ho D FCC Status Qou Mcd the FCC and the tof seeds) total  C Status Qou Mcd the mean of the total time a patie Z-TEST  MODEL(8) 1019 66.58	MODEL(s8) MODEL(s8) 948 17:55 24:94  MODEL(s8) Model's mean of the time a patient pedel's (Monda) FY99 FCC nt is in the clin  MODEL(s8) 948 67:24
EXAMED  Level of Significance .05  17.55 16.86 24.94 14.77 20.33 948  SIME PATIENT IN SYSTEM  Level of Significance .05  67.24 65.47 37.46 61.62 72.85	patient waits to see a P H1= A significant difference of the see a PCP  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no signific (Monday & Thursday with one set of the see a PCP)  H1= A significant difference of the see a PCP  MEAN MEDIAN STD DEV 95% CI LOW 95% CI LOW 95% CI LOW 95% CI HIGH	CP. Ince exist between the milit seeds) total time a patie is (Monday & Thursday with an ince exist between the median of the median is (Monday & Thursday is (Monday & Thursday with an ince exist between the median is exist between the median is (Monday & Thursday with an ince exist between the median is	ean of the FY99 FC int waits to see a Print waits in the FY99 FC and the rest of seeds)  SAMPLE SIZE  SAMPLE SIZE	C Status QouMcCP and the mean seeds) total time a Z-TEST  MODEL(8) 1019 17.84 32.83  0.22 III To Reject Ho D FCC Status Qou Mc tof seeds) total the mean of the total time a patie Z-TEST  MODEL(8) 1019	MODEL(s8) Model's Model's Model's Mean of the time a patient MODEL(s8) Model's
EXAMED  Level of Significance .05  17.55 16.86 24.94 14.77 20.33 948  IME PATIENT IN SYSTEM  Level of Significance .05  67.24 65.47 37.46 61.62 72.85	patient waits to see a P H1= A significant difference of the part	CP. Ince exist between the milit seeds) total time a patie is (Monday & Thursday with an ince exist between the mass of seeds) total Model's (Monday & Thursday & Thursday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds) total time a patie inday & Thursday with an ince exist between the mass of seeds).	ean of the FY99 FC int waits to see a Pi ith another set of se  .05 SIG =Z=+ OI  SAMPLE SIZE MEAN STD DEV  TR= Fa e mean of the FY99 time a patient is in the day with another se an of the FY99 FC int is in the FCC and other set of seeds)  .05 SIG =Z=+ OI;  SAMPLE SIZE MEAN	C Status QouMcCP and the mean seeds) total time a z-TEST  MODEL(8) 1019 17.84 32.83  0.22 III To Reject Ho D FCC Status Qoume to fee FCC and the tof seeds) total C Status Qoume to the mean of the total time a patie z-TEST  MODEL(8) 1019 66.58 38.11	MODEL(s8 948 17.55 24.94 Model's (Monda) FY99 FCC Int is in the clin MODEL(s8) 948 67.24

Reliability of FY99 Status Quo Model (Different Random Seeds)

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TIME PATIENT			70 ·	
WAITS TO BE			ya Atharia	
EXAMINED		T/W/F	gerthaus.	
MEAN		18.46		
MEDIAN		17.14		
MIN		2.26		
MAX		345.68		
STD DEV		57.24		
95% CI LOW		15.50		
95% CI HIGH		21.36	i.	
SAMPLE SIZE		1654		
TIME PATIENT			3.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4.4	
IN CLINIC			AUD TO	
MEAN		86.05	77 h. 1766 -	
MEDIAN		68.85		
MIN	一种多数多数的 医直肠动脉管	67.52	$\mathcal{P}^{\mathcal{A}}$	
MAX		17.24	W.	
STD DEV		385.64		
95% CI LOW		61.40		
95% CI LOW 95% CI HIGH		63.57		
SAMPLE SIZE		74 13		
OMWITTE SIZE	Ho= There is no significant difference t	1654		
Level of	H1= A significant difference exist betwee Wenesday, & Friday with one set of set FCC Status Qou Model's (Tuesday, We	eds) total time a patient walts to see a	PCP and the me	an of the FY99
Significance .05			) Julius 1	
40.40	그는 그 지원회사 사람들이 그 사람들은 그 사람들이 그리고 한다.	ODEL(13) .05 SIG =Z=+ OR -1.96	Z-TEST	
18.46 17.14	이 가능하는 바로 바로 할 수 있다. 그 중에는 이 하는 사람이 없는 것이 하는 어떻게 되었습니다.	17.84	4	
57.24	MEDIAN STD DEV		MODEL(13)	
31.24				
化二十二烷 化复数皮肤设计 化二十二	그는 회문 사람 물론회에 하게 됐다.	32.83 SAMPLE SIZE	1019	1654
15.50	95% CI LOW	MEAN	17.84	18.46
15.50 21.36	95% CI LOW 95% CI HIGH	MEAN STO DEV	1.79	1654
15.50	95% CI LOW	MEAN STD DEV 1019	17.84 32.83	1654 18.46
15.50 21.36	95% CI LOW 95% CI HIGH	MEAN STD DEV 1019 TR:	17.84 32.83 = -0.36	1654 18.46 57.24
15.50 21.36	95% CI LOW 95% CI HIGH SAMPLE SIZE	MEAN STD DEV 1019 TR:	17.84 32.83 = -0.36 Fail To Reject Ho	1654 18.46 57.24
15.50 21.36 1654	95% CI LOW 95% CI HIGH	MEAN STD DEV 1019 TR: etween the mean of the FY99 FCC Seds) total time a patient is in the FCC	17.84 32.83  = -0.36  Fail To Reject Ho tatus Qou Model's and the mean of t	1654 18.46 57.24 s (Tuesday, he FY99 FCC
15.50 21.36 1654 TIME PATIENT IN SYSTEM	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant difference b Wenesday, & Friday with one set of see Status Qou Model's (Tuesday, Wenesd clinic.  H1= A significant difference exist betwee Wenesday, & Friday with one set of see	MEAN STD DEV  1019 TR: etween the mean of the FY99 FCC S eds) total time a patient is in the FCC lay, & Friday with another set of seeds een the mean of the FY99 FCC Status eds) total time a patient is in the FCC	17.84 32.83  = -0.36  Fail To Reject Ho tatus Qou Model's and the mean of t s) total time a patic Qou Model's (Tur and the mean of t	1654 18.46 57.24 s (Tuesday, he FY99 FCC ent is in the esday, he FY99 FCC
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15.50 21.36 1654 FIME PATIENT IN SYSTEM	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant difference b Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  H1= A significant difference exist betwee Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  MC	MEAN STD DEV  1019  TR: Detween the mean of the FY99 FCC Seds) total time a patient is in the FCC ay, & Friday with another set of seeds total time a patient is in the FCC ay, & Friday with another set of seeds observed time and patient is in the FCC ay, & Friday with another set of seeds on the FCC ay, & Friday with another set of seeds on the FCC ay, & Friday with another set of seeds on the FCC ay.	17.84 32.83  = -0.36  Fail To Reject Ho tatus Qou Model's and the mean of t s) total time a patic Qou Model's (Tur and the mean of t	1654 18.46 57.24 s (Tuesday, he FY99 FCC ent is in the esday, he FY99 FCC
15.50 21.36 1654 FIME PATIENT IN SYSTEM Level of Ignificance .05	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant difference b Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  H1= A significant difference exist betwee Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  MC	MEAN STD DEV  1019 TR:  retween the mean of the FY99 FCC Seds) total time a patient is in the FCC ay, & Friday with another set of seeds total time a patient is in the FCC ay, & Friday with another set of seeds ay, & Friday with another set of seeds	17.84 32.83  = -0.36  Fail To Reject Ho tatus Qou Model's and the mean of the straight of the straight of the straight of the mean of the straight of the mean of the straight of the mean of the straight of	1654 18.46 57.24 Is (Tuesday, he FY99 FCC ent is in the esday, he FY99 FCC ent is in the
15.50 21.36 1654  FIME PATIENT IN SYSTEM  Level of gnificance .05 68.85	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant difference b Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  H1= A significant difference exist betwee Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  MC MEAN MEDIAN	MEAN STD DEV  1019  TR: Detween the mean of the FY99 FCC Status and the FY99 F	17.84 32.83  = -0.36  Fail To Reject Ho status Qou Model's and the mean of the status of the status of the status of the mean of the mean of the status of the mean of the mean of the status of the mean of the mean of the status of the mean of the status of the status of the mean of the status of the mean of the status of t	1654 18.46 57.24  s (Tuesday, he FY99 FCC ent is in the esday, he FY99 FCC ent is in the MODEL(s13
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15.50 21.36 1654 FIME PATIENT IN SYSTEM Level of Ignificance .05 68.85 67.52 61.40 63.57	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant difference b Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  H1= A significant difference exist betwee Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  MC MEAN MEDIAN STD DEV 95% CI LOW	MEAN STD DEV  1019  TR: Detween the mean of the FY99 FCC Status and the FY99 FCC Status and the mean of the FY99 FCC Status and the FY99 F	17.84 32.83  = -0.36  Fail To Reject Ho itatus Qou Model's and the mean of the straight of the straight of the straight of the straight of the mean of the straight of the mean of the straight of the mean of the straight of	1654 18.46 57.24 s (Tuesday, he FY99 FCC ent is in the esday, he FY99 FCC ent is in the MODEL(s13 1654 68.85
15.50 21.36 1654 FIME PATIENT IN SYSTEM Level of Ignificance .05 68.85 67.52 61.40 63.57 74.13	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant difference b Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  H1= A significant difference exist betwee Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  MC MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	MEAN STD DEV  1019  TR:  Detween the mean of the FY99 FCC Seds) total time a patient is in the FCC ay, & Friday with another set of seeds total time a patient is in the FCC ay, & Friday with another set of seeds botal time a patient is in the FCC ay, & Friday with another set of seeds  DEL(13) .05 SIG =Z=+ OR -1.96 66:58  38:11 SAMPLE SIZE  MEAN STD DEV	17.84 32.83  = -0.36  Fail To Reject Ho itatus Qou Model's and the mean of the straight of the straight of the straight of the straight of the mean of the straight of the	1654 18.46 57.24 s (Tuesday, he FY99 FCC ent is in the esday, he FY99 FCC ent is in the
15.50 21.36 1654 FIME PATIENT IN SYSTEM Level of Ignificance .05 68.85 67.52 61.40 63.57	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant difference b Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  H1= A significant difference exist betwee Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  MC MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	MEAN STD DEV  1019  TR:  etween the mean of the FY99 FCC S eds) total time a patient is in the FCC lay, & Friday with another set of seeds een the mean of the FY99 FCC Status eds) total time a patient is in the FCC ay, & Friday with another set of seeds  DDEL(13) .05 SIG =Z=+ OR -1.96 66.58  38.11 SAMPLE SIZE MEAN STD DEV  1019	17.84 32.83  = -0.36  Fail To Reject Ho tatus Qou Model's and the mean of the standard the mean of the standard the mean of the total time a patient of the mean of the standard the mean of the standard time a patient	1654 18.46 57.24 s (Tuesday, he FY99 FCC ent is in the esday, he FY99 FCC ent is in the MODEL(s13 1654 68.85
15.50 21.36 1654 TIME PATIENT IN SYSTEM Level of gnificance .05 68.85 67.52 61.40 63.57 74.13	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant difference b Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  H1= A significant difference exist betwee Wenesday, & Friday with one set of sec Status Qou Model's (Tuesday, Wenesd clinic.  MC MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	MEAN STD DEV  1019  TR:  etween the mean of the FY99 FCC S eds) total time a patient is in the FCC lay, & Friday with another set of seeds een the mean of the FY99 FCC Status eds) total time a patient is in the FCC ay, & Friday with another set of seeds  DDEL(13) .05 SIG =Z=+ OR -1.96 66.58  38.11 SAMPLE SIZE MEAN STD DEV  1019	17.84 32.83  = -0.36  Fail To Reject Ho itatus Qou Model's and the mean of the straight of the straight of the straight of the straight of the mean of the straight of the mean of the straight of the mean of the straight of	1654 18.46 57.24 s (Tuesday, he FY99 FCC ent is in the esday, he FY99 FCC ent is in the MODEL(s13 1654 68.85

Reliability of FY99 Status Ouo Model (Multiple Iterations)

<b>表示。</b> 是否有关的言意的意思	나가들이 가장 나가에게 느리를 가장이 하셨다는 나라고 얼굴하셨다면 나왔다.	HARRING THE	\$1. 1. 1. 1 N. 1 N. 1 1. 1 1. 1 1. 1 1.	THE PROPERTY AND A STATE OF THE	"SELECT OF ALL ESCAPE OF PLANTED FOR
TIME PATIENT					
WAITS TO BE					
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MEAN			M/TH		
MEDIAN			16,91 16,11		
MIN			2.02		
MAX			GU ANG BERTADIH BANG ANG AYAR KETANA		
STD DEV			199.11 30.55		
95% CI LOW			30.53 15.81		
95% CI HIGH			18.01		
SAMPLE SIZE			3618		
TIME PATIENT IN			3016		
CLINIC					
MEAN			65.01		
MEDIAN			64.46		
MIN			18.12		
MAX			16.12 246.79		
STD DEV			240.79 38.11		
95% CI LOW			62.78		
95% CI HIGH			67.24		
SAMPLE SIZE			3618		
TIME PATIENT	Ho= There is no significant difference Thursday ran 8 iterations) total tin	ne a patient wait:	s to see a PCP and the me	tatus Qou Model's an of the FCC Mod	(Monday & del (Monday &
WAITS TO BE EXAMED	Thursday ran 30 iterations) total t				
EXAMED	H1= A significant difference exist	between the me	an of the FY99 FCC Status PCP and the mean of the F	Qou Model's (Mo CC Model (Monda	nday & Thursda ay & Thursday
EXAMED  Level of Significance .05	H1= A significant difference exist ran 8 iterations) total time a patiel	between the me	an of the FY99 FCC Status PCP and the mean of the F	Qou Model's (Mor CC Model (Mond: Z-TEST	nday & Thursda ay & Thursday
EXAMED  evel of Significance .05  16.91	H1= A significant difference exist ran 8 iterations) total time a patier ran 30 iterations) total time a patie MEAN	between the me nt waits to see a ent waits for PCF	an of the FY99 FCC Status PCP and the mean of the F	CC Model (Monda	nday & Thursda ay & Thursday
EXAMED  evel of Significance .05  16.91 16.11	H1= A significant difference exist ran 8 iterations) total time a patier ran 30 iterations) total time a patie	between the me nt waits to see a ent waits for PCF MODEL(8)	an of the FY99 FCC Status PCP and the mean of the F	CC Model (Monda	ay & Thursday
EXAMED  .evel of Significance	H1= A significant difference exist ran 8 iterations) total time a patier ran 30 iterations) total time a patie MEAN	between the me nt waits to see a ent waits for PCF MODEL(8)	an of the FY99 FCC Status PCP and the mean of the F	CC Model (Monda	ay & Thursday
EXAMED  .evel of Significance	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI_LOW	between the me nt waits to see a ent waits for PCF MODEL(8) 17.84	an of the FY99 FCC Status PCP and the mean of the f .05 SIG =Z=+ OR -1,96	CC Model (Mond: Z-TEST  MODEL(8)	ay & Thursday  MODEL(30
EXAMED  .evel of Significance .05  16.91 16.11 30.55 15.81 18.01	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	between the me nt waits to see a ent waits for PCF MODEL(8) 17.84	an of the FY99 FCC Status PCP and the mean of the f05 SIG =Z=+ OR -1.96 SAMPLE SIZE	CC Model (Monda Z-TEST MODEL(8) 1019	ay & Thursday  MODEL(30 3618
EXAMED  .evel of Significance	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI_LOW	between the me nt waits to see a ent waits for PCF MODEL(8) 17.84	an of the FY99 FCC Status PCP and the mean of the f  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN	CC Model (Monda Z-TEST MODEL(8) 1019 17.84	MODEL(30, 3618, 16,91
EXAMED  Level of Significance .05  16.91 16.11 30.55 15.81 18.01	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	between the me it waits to see a ent waits for PCF MODEL(8) 17,84 32.83	an of the FY99 FCC Status PCP and the mean of the f05 SIG =Z=+ OR -1,96  SAMPLE SIZE MEAN STD DEV	CC Model (Monda Z-TEST MODEL(8) 1019 17.84 32.83 = 0.81	MODEL(30) 3618 16.91 30.55
EXAMED  Level of Significance .05  16.91 16.11 30.55 15.81 18.01	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie man 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE	between the me nt waits to see a ent waits for PCF MODEL(8) 17.84 32.83	an of the FY99 FCC Status PCP and the mean of the f 05 SIG =Z=+ OR -1,96  SAMPLE SIZE MEAN STD DEV  TR:	CC Model (Monda Z-TEST MODEL(8) 1019 17.84 32.83 - 0.81 Fall To Reject Ho	MODEL(30 3618 16:91 30:55
EXAMED  Level of Significance .05  16.91 16.11 30.55 15.81 18.01	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	between the me nt waits to see a ent waits for PCF MODEL(8) 17.84 32.83 1019  nce between the le a patient is in i	an of the FY99 FCC Status PCP and the mean of the form .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TRE I mean of the FY99 FCC Status	Z-TEST  MODEL(8) 1019 17.84 32.83  - 0.81  Fall To Reject Ho atus Qou Model's	MODEL(30) 3618 16:91 30:55
EXAMED  Level of Significance .05  16.91 16.11 30.55 15.81 18.01 3618	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant differe Thursday ran 8 iterations) total tim ran 30 iterations) total time a patie H1= A significant difference exist	between the ment waits to see a sent waits for PCF MODEL(8) 17.84 32.83 1019  The between the real patient is in the clinic between the meant is in the FCC are sent waits are sent waits and waits are sent waits for PCF.	an of the FY99 FCC Status PCP and the mean of the form .05 SIG =Z=+ OR -1,96  SAMPLE SIZE MEAN STD DEV  TR: mean of the FY99 FCC Status an of the FY99 FCC Status	Z-TEST  MODEL(8) 1019 17.84 32.83  = 0.81 Fail To Reject Ho atus Qou Model's (Mo	MODEL(30 3618 16.91 30.55 (Monday & anday & Thursday & Thursday
EXAMED  Level of Significance .05  16.91 16.11 30.55 15.81 18.01 3618  TIME PATIENT IN SYSTEM	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie man 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant differe Thursday ran 8 iterations) total time a patie man 30 iterations) total time a patier ran 8 iterations) total time a patier	between the ment waits to see a sent waits for PCF MODEL(8) 17.84 32.83 1019  The between the sea patient is in the clinic between the meat the clinic.	an of the FY99 FCC Status PCP and the mean of the F 05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR: mean of the FY99 FCC Status and the mean of the FCC Mi	Z-TEST  MODEL(8) 1019 17.84 32.83  = 0.81 Fall To Reject Ho atus Qou Model's (Morodel (Morode	MODEL(30 3618 16.91 30.55 (Monday & anday & Thursday & Thursday
EXAMED  Level of Significance .05  16.91 16.11 30.55 15.81 18.01 3618  TIME PATIENT IN SYSTEM	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie man 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant differe Thursday ran 8 iterations) total time a patie man 30 iterations) total time a patier ran 8 iterations) total time a patier	between the ment waits to see a sent waits for PCF MODEL(8) 17.84 32.83 1019 The between the sea patient is in the clinic between the meat is in the FCC at the clinic MODEL(8)	an of the FY99 FCC Status PCP and the mean of the form .05 SIG =Z=+ OR -1,96  SAMPLE SIZE MEAN STD DEV  TR: mean of the FY99 FCC Status an of the FY99 FCC Status	Z-TEST  MODEL(8) 1019 17.84 32.83  = 0.81 Fail To Reject Ho atus Qou Model's (Mo	MODEL(30 3618 16.91 30.55 (Monday & anday & Thursday & Thursday
EXAMED  .evel of Significance .05  16.91 16.11 30.55 15.81 18.01 3618  TIME PATIENT IN SYSTEM  evel of Significance .05	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant differe Thursday ran 8 iterations) total time a patier ran 30 iterations) total time a patier iterations)	between the ment waits to see a sent waits for PCF MODEL(8) 17.84 32.83 1019  The between the sea patient is in the clinic between the meat the clinic.	an of the FY99 FCC Status PCP and the mean of the F 05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR: mean of the FY99 FCC Status and the mean of the FCC Mi	Z-TEST  MODEL(8) 1019 17.84 32.83  = 0.81 Fall To Reject Ho atus Qou Model's (Morodel (Model	MODEL(30 3618 16:91 30:55 (Monday & anday & Thursdanday & Thursday
EXAMED  .evel of Significance .05  16.91 16.11 30.55 15.81 18.01 3618  TIME PATIENT IN SYSTEM  evel of Significance .05	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant differer Thursday ran 8 iterations) total time a patier ran 30 iterations) total time a patier iterations)	between the ment waits to see a sent waits for PCF MODEL(8) 17.84 32.83 1019 Ince between the sea patient is in the clinic between the meat is in the FCC at the clinic MODEL(8) 66.58	an of the FY99 FCC Status PCP and the mean of the F 05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR: mean of the FY99 FCC Status and the mean of the FCC M  .05 SIG =Z=+ OR -1.96	Z-TEST  MODEL(8) 1019 17.84 32.83  = 0.81 Fail To Reject Ho atus Qou Model's (Model (Model & Test) Qou Model's (Model & Test) Z-TEST	MODEL(30 3618 16.91 30.55 (Monday & anday & Thursdanday & Thursday anday & Thursdanday ran 30
EXAMED  .evel of Significance .05  16.91 16.11 30.55 15.81 18.01 3618  TIME PATIENT IN SYSTEM  evel of Significance .05  65.01 64.46	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant differe Thursday ran 8 iterations) total time a patier ran 30 iterations) total time a patier iterations)	between the ment waits to see a sent waits for PCF MODEL(8) 17.84 32.83 1019 The between the sea patient is in the clinic between the meat is in the FCC at the clinic MODEL(8)	an of the FY99 FCC Status PCP and the mean of the F 05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR: I mean of the FY99 FCC Status and the mean of the FCC Mi  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE	Z-TEST  MODEL(8) 1019 17.84 32.83  = 0.81 Fail To Reject Ho atus Qou Model's (Model (M	MODEL(30 3618 16.91 30.55 (Monday & anday & Thursda aday & Thursda aday ran 30 MODEL(30) 3618
EXAMED  .evel of Significance .05  16.91 16.11 30.55 15.81 18.01 3618  TIME PATIENT IN SYSTEM  evel of Significance .05  65.01 64.46 38.11	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant difference Thursday ran 8 iterations) total time a patier ran 30 iterations) total time a patier iterations) total time a patier iterations) total time a patier iterations) total time a patient is in MEAN MEDIAN STD DEV	between the ment waits to see a sent waits for PCF MODEL(8) 17.84 32.83 1019 Ince between the sea patient is in the clinic between the meat is in the FCC at the clinic MODEL(8) 66.58	an of the FY99 FCC Status PCP and the mean of the F  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR: I mean of the FY99 FCC Status the FCC and the mean of the In of the FY99 FCC Status and the mean of the FCC Mi  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN	Z-TEST  MODEL(8) 1019 17.84 32.83  = 0.81 Fail To Reject Ho atus Qou Model's (Morodel (Monday & T)  Z-TEST  MODEL(8) 1019 66.58	MODEL(30, 3618, 16.91, 30.55) (Monday & onday & Thursday anday & Thursday ran 30, 3618, 65.01)
EXAMED  .evel of Significance .05  16.91 16.11 30.55 15.81 18.01 3618  TIME PATIENT IN SYSTEM  evel of Significance .05  65.01 64.46 38.11 62.78 67.24	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant difference Thursday ran 8 iterations) total time a patier ran 30 iterations) total time a patier ran 8 iterations) total time a patier iterations) total time a patient is in MEAN MEDIAN STD DEV 95% CI LOW	between the ment waits to see a sent waits for PCF MODEL(8) 17.84 32.83 1019 nce between the sea patient is in the clinic between the meat is in the FCC at the clinic. MODEL(8) 66.58 38.11	an of the FY99 FCC Status PCP and the mean of the F 05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR: I mean of the FY99 FCC Status and the mean of the FCC Mi  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE	Z-TEST  MODEL(8) 1019 17.84 32.83  = 0.81 Fail To Reject Ho atus Qou Model's (Model (M	MODEL(30, 3618, 16.91, 30.55) (Monday & Sinday & Thursdanursday ran 30, 3618, 3618)
EXAMED  .evel of Significance .05  16.91 16.11 30.55 15.81 18.01 3618  TIME PATIENT IN SYSTEM  evel of Significance .05  65.01 64.46 38.11 62.78 67.24	H1= A significant difference exist ran 8 iterations) total time a patie ran 30 iterations) total time a patie ran 30 iterations) total time a patie MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no significant difference Thursday ran 8 iterations) total time a patier ran 30 iterations) total time a patier flerations) total time a patier iterations) total time a patier iterations) total time a patier iterations) total time a patient is in MEAN MEDIAN STD DEV 95% CI LOW 95% CI LOW 95% CI LOW	between the ment waits to see a sent waits for PCF MODEL(8) 17.84 32.83 1019 Ince between the sea patient is in the clinic between the meat is in the FCC at the clinic MODEL(8) 66.58	an of the FY99 FCC Status PCP and the mean of the form .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR: mean of the FY99 FCC Status the FCC and the mean of the nof the FY99 FCC Status and the mean of the FCC Mi .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV	Z-TEST  MODEL(8) 1019 17.84 32.83  = 0.81 Fail To Reject Ho atus Qou Model's (Morodel (Monday & T)  Z-TEST  MODEL(8) 1019 66.58	MODEL(30) 3618 16:91 30:55  (Monday & horday & Thursday & Thursday ran 30)  MODEL(30) 3618 65:01

## Reliability of FY99 Status Quo Model (Multiple Iterations)

TIME PATIENT					
WAITS TO BE					
EXAMED			TIMIF		
MEAN			18.15		
MEDIAN			16.74		
MIN			1.99		
MAX			168.44		
STD DEV			27.74		
95% CI LOW			16.47		
95% CI HIGH			19.82		
SAMPLE SIZE			3638		
TIME PATIENT IN					
CLINIC					
MEAN			68:46		
MEDIAN			65.32		
MIN MAX			17.31		
STD DEV			296.66		
95% CI LOW			46.56		
95% CI HIGH			64.89 72.03		
SAMPLE SIZE			, 2.03 3638		
	Ho= There is no significant di	fference hetween th		tatua Oau Madalla	<i></i>
TIME DATIENT	Wednesday & Friday 13 itera	tions) total time a na	tiont waits to see a DCD as		FAA
TIME PATIENT WAITS TO BE EXAMED	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid	tions) total time a pa ay ran 30 iterations)	tient waits to see a PCP ar total time a patient waits fo	nd the mean of the or a PCP.	FCC Model
WAITS TO BE EXAMED	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e	tions) total time a pa ay ran 30 iterations) xist between the me tions) total time a pa	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar	nd the mean of the or a PCP. s Qou Model's (Tue nd the mean of the	FCC Model
WAITS TO BE EXAMED evel of Significance	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera	tions) total time a pa ay ran 30 iterations) xist between the me tions) total time a pa ay ran 30 iterations)	tient waits to see a PCP ar total time a patient waits fo an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits fo	nd the mean of the r a PCP. s Qou Model's (Tue nd the mean of the r PCP.	FCC Model
WAITS TO BE EXAMED evel of Significance	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera	tions) total time a pa ay ran 30 iterations) xist between the me tions) total time a pa ay ran 30 iterations)	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar	nd the mean of the r a PCP. s Qou Model's (Tue nd the mean of the r PCP.	FCC Model
WAITS TO BE EXAMED evel of Significance .05	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid	tions) total time a pa ay ran 30 iterations) xist between the me tions) total time a pa ay ran 30 iterations) MODEL(8)	tient waits to see a PCP ar total time a patient waits fo an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits fo	nd the mean of the ir a PCP. S Qou Model's (Tue id the mean of the ir PCP. Z-TEST	FCC Model sday, FCC Model
WAITS TO BE EXAMED  evel of Significance .05	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid MEAN MEDIAN STD DEV	tions) total time a pa ay ran 30 iterations) xist between the me tions) total time a pa ay ran 30 iterations) MODEL(8)	tient waits to see a PCP ar total time a patient waits fo an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits fo	nd the mean of the r a PCP. s Qou Model's (Tue nd the mean of the r PCP.	FCC Model
WAITS TO BE EXAMED evel of Significance .05 18.15 16.74 27.74 16.47	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid MEAN MEDIAN STD DEV 95% CI LOW	tions) total time a pa ay ran 30 iterations) sist between the me tions) total time a pa ay ran 30 iterations) MODEL(8) 18.41	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96	nd the mean of the or a PCP. S Qou Model's (Tue of the mean of the rPCP. Z-TEST  MODEL(13)	FCC Model sday, FCC Model  MODEL(30
WAITS TO BE EXAMED evel of Significance .05 18.15 16.74 27.74 16.47 19.82	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid MEAN MEDIAN STD DEV	tions) total time a pa ay ran 30 iterations) sist between the me tions) total time a pa ay ran 30 iterations) MODEL(8) 18.41	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96 SAMPLE SIZE	nd the mean of the or a PCP.  S Qou Model's (Tue of the mean of the rPCP.  Z-TEST  MODEL(13) 1606	FCC Model sday, FCC Model MODEL(30 3638
WAITS TO BE EXAMED evel of Significance .05 18.15 16.74 27.74 16.47	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid MEAN MEDIAN STD DEV 95% CI LOW	tions) total time a pa ay ran 30 iterations) sist between the me tions) total time a pa ay ran 30 iterations) MODEL(8) 18.41	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN	nd the mean of the or a PCP.  S Qou Model's (Tue of the mean of the r PCP.  Z-TEST  MODEL(13) 1606 18.41	FCC Model sday, FCC Model MODEL(30 3638 18.15
WAITS TO BE EXAMED evel of Significance .05 18.15 16.74 27.74 16.47 19.82	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE	tions) total time a pa ay ran 30 iterations) xist between the me tions) total time a pa ay ran 30 iterations) MODEL(8) 18.41 22.40	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96  SAMPLE SIZE  MEAN  STD DEV	nd the mean of the ra PCP.  S Qou Model's (Tue to the mean of the r PCP.  Z-TEST  MODEL(13)  1606  18.41  22.40  = 0.36  Fall To Reject Ho	sday, FCC Model MODEL(30 3638 18.15 27.74
WAITS TO BE EXAMED evel of Significance .05 18.15 16.74 27.74 16.47 19.82	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	tions) total time a pa ay ran 30 iterations)  sist between the me tions) total time a pa ay ran 30 iterations)  MODEL(8)  18.41  22.40  1606  ference between the ions) total time a pa	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TROMBER OF TREE SIZE MEAN TROMBER OF TREE SIZE MEAN TROMBER OF TREE SIZE MEAN TREE TREE TREE SIZE MEAN	nd the mean of the ra PCP.  S Qou Model's (Tue to the mean of the r PCP.  Z-TEST  MODEL(13)  1606  18.41  22.40  = 0.36  Fail To Reject Ho latus Qou Model's (	sday, FCC Model MODEL(30 3638 18.15 27.74
WAITS TO BE EXAMED  EVALUATE TO BE EXAMED  18.15 16.74 27.74 16.47 19.82 3638	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  H0= There is no significant dif Wednesday & Friday 13 iterat Wednesday & Friday ran 30 it H1= A significant difference e: Wednesday & Friday 13 iterat	tions) total time a pa ay ran 30 iterations)  xist between the me tions) total time a pa ay ran 30 iterations)  MODEL(8)  18.41  22.40  1606  ference between the ions) total time a pal erations) total time a	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TROMBER OF TROMBER OF SIGNET IS IN THE FCC and the repatient is in the clinic.  In of the FY99 FCC Status itent is in the FCC and the repatient is in the FCC.	nd the mean of the ra PCP.  S Qou Model's (Tue id the mean of the r PCP.  Z-TEST  MODEL(13) 1606 18.41 22.40  = 0.36  Fail To Reject Ho tatus Qou Model's (Tues idean of the FCC Model's (Tues)	FCC Model sday, FCC Model  MODEL(30 3638 18.15 27.74  Tuesday, lodel (Tuesday
WAITS TO BE EXAMED  EXAMED  SVEL of Significance .05  18.15 .16.74 .27.74 .16.47 .19.82 .3638  FIME PATIENT IN SYSTEM  vel of Significance	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  H0= There is no significant dif Wednesday & Friday 13 iterat Wednesday & Friday ran 30 it H1= A significant difference e:	tions) total time a pa ay ran 30 iterations)  Exist between the me tions) total time a pa ay ran 30 iterations)  MODEL(8)  18.41  22.40  1606  ference between the ions) total time a pal erations) total time a erations) total time a pal erations) total time a pal erations) total time a	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TROMBER OF TROMBER OF TROMBER OF THE FCC and the repatient is in the clinic.	nd the mean of the or a PCP.  S Qou Model's (Tue of the mean of the rPCP.  Z-TEST  MODEL(13)  1606  18.41  22.40  = 0.36  Fall To Reject Ho latus Qou Model's (Tue on mean of the FCC Model's (Tue on mean of the FCC Model of the	sday, FCC Model  MODEL(30, 3638, 18.15, 27.74, 19.10del (Tuesday, 19.10del (Tuesday, 19.10del)
WAITS TO BE EXAMED  EXAMED  SVEL of Significance .05  18.15 .16.74 .27.74 .16.47 .19.82 .3638  FIME PATIENT IN SYSTEM  vel of Significance	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  H0= There is no significant dif Wednesday & Friday 13 iterat Wednesday & Friday ran 30 it H1= A significant difference e: Wednesday & Friday 13 iterat	tions) total time a pa ay ran 30 iterations)  sist between the me tions) total time a pa ay ran 30 iterations)  MODEL(8)  18.41  22.40  1606  ference between the ions) total time a pal erations) total time a kist between the me- ions) total time a pal erations) total time a	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TROMBER OF TROMBER OF SIGNET IS IN THE FCC and the repatient is in the clinic.  In of the FY99 FCC Status itent is in the FCC and the repatient is in the FCC.	nd the mean of the ra PCP.  S Qou Model's (Tue id the mean of the r PCP.  Z-TEST  MODEL(13) 1606 18.41 22.40  = 0.36  Fail To Reject Ho tatus Qou Model's (Tues idean of the FCC Model's (Tues)	FCC Model sday, FCC Model  MODEL(30 3638 18.15 27.74  Tuesday, lodel (Tuesday
WAITS TO BE EXAMED  EXAMED  Power of Significance .05  18.15 .16.74 .27.74 .16.47 .19.82 .3638  FIME PATIENT IN SYSTEM  vel of Significance .05	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  H0= There is no significant dif Wednesday & Friday 13 iterat Wednesday & Friday ran 30 it H1= A significant difference e: Wednesday & Friday 13 iterat	tions) total time a pa ay ran 30 iterations)  Exist between the me tions) total time a pa ay ran 30 iterations)  MODEL(8)  18.41  22.40  1606  ference between the ions) total time a pal erations) total time a erations) total time a pal erations) total time a pal erations) total time a	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TROMBER OF TROMBER OF TROMBER OF THE FCC and the repatient is in the clinic.	nd the mean of the ra PCP.  S Qou Model's (Tue the mean of the r PCP.  Z-TEST  MODEL(13)  1606  18.41  22.40  = 0.36  Fall To Reject Ho latus Qou Model's (Tue mean of the FCC Monean of the FCC	FCC Model sday, FCC Model  MODEL(30 3638 18.15 27.74  Tuesday, odel (Tuesday, odel (Tuesday,
WAITS TO BE EXAMED  EXAMED  PVel of Significance .05  18.15 .16.74 .27.74 .16.47 .19.82 .3638  FIME PATIENT IN SYSTEM  EVEl of Significance .05  68.46	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  H0= There is no significant dif Wednesday & Friday 13 iterat Wednesday & Friday ran 30 it H1= A significant difference e: Wednesday & Friday 13 iterat	tions) total time a pa ay ran 30 iterations)  sist between the me tions) total time a pa ay ran 30 iterations)  MODEL(8)  18.41  22.40  1606  ference between the ions) total time a pal erations) total time a kist between the me- ions) total time a pal erations) total time a	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TRAMMENT OF TRAME IN THE STORY OF TRAME IS IN THE FCC and the patient is in the clinic.  .05 SIG =Z=+ OR -1.96	nd the mean of the or a PCP.  S Qou Model's (Tue of the mean of the r PCP.  Z-TEST  MODEL(13) 1606 18.41 22.40  = 0.36  Fail To Reject Ho latus Qou Model's (Tues one of the FCC Model's (Tues one of the FCC Model of the FCC Mode	FCC Model sday, FCC Model  MODEL(30, 3638, 18.15, 27.74) Tuesday, odel (Tuesday, odel (Tuesday, odel) (Tuesday
WAITS TO BE EXAMED  EXAMED  EXAMED  18.15 16.74 27.74 16.47 19.82 3638  TIME PATIENT IN SYSTEM  EVEL Of Significance .05  68.46 65.32	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  H0= There is no significant dif Wednesday & Friday 13 iterat Wednesday & Friday ran 30 it H1= A significant difference e: Wednesday & Friday 13 iterat Wednesday & Friday 13 iterat Wednesday & Friday 13 iterat Wednesday & Friday ran 30 it  MEAN MEDIAN	tions) total time a paray ran 30 iterations)  exist between the metions) total time a paray ran 30 iterations)  MODEL(8)  18.41  22.40  1606  ference between the ions) total time a parations) total	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU	nd the mean of the or a PCP.  S Qou Model's (Tue of the mean of the r PCP.  Z-TEST  MODEL(13) 1606 18.41 22.40  = 0.36  Fail To Reject Ho latus Qou Model's (Tues one of the FCC Model's (Tues one of the FCC Model of the FCC Mode	FCC Model sday, FCC Model  MODEL(30 3638 18:15 27:74  Tuesday, lodel (Tuesday odel (Tuesday odel (Tuesday odel (Tuesday
WAITS TO BE EXAMED  EXAMED  OVEL OF Significance .05  18.15 16.74 27.74 16.47 19.82 3638  FIME PATIENT IN SYSTEM  Vel of Significance .05  68.46 65.32 46.56	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  H0= There is no significant dif Wednesday & Friday 13 iterat Wednesday & Friday ran 30 it H1= A significant difference e: Wednesday & Friday 13 iterat Wednesday & Friday Tan 30 it  MEAN MEDIAN STD DEV	tions) total time a paray ran 30 iterations)  exist between the metions) total time a paray ran 30 iterations)  MODEL(8)  18.41  22.40  1606  ference between the ions) total time a parations) total	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TRUE mean of the FY99 FCC Status ient is in the FCC and the repatient is in the clinic.  an of the FY99 FCC Status ient is in the FCC and the repatient is in the clinic.  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN	nd the mean of the or a PCP.  S Qou Model's (Tue of the mean of the r PCP.  Z-TEST  MODEL(13) 1606 18.41 22.40  = 0.36 Fail To Reject Ho tatus Qou Model's (Tues on the FCC Mean of the FCC Me	FCC Model sday, FCC Model  MODEL(30 3638 18.15 27.74  Tuesday, odel (Tuesday odel (Tuesday odel (Tuesday odel (Tuesday odel (Tuesday
WAITS TO BE EXAMED  vel of Significance .05  18.15 16.74 27.74 16.47 19.82 3638  TIME PATIENT IN SYSTEM  vel of Significance .05  68.46 65.32 46.56 64.89	Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid H1= A significant difference e Wednesday & Friday 13 itera (Tuesday, Wednesday & Frid  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  H0= There is no significant dif Wednesday & Friday 13 iterat Wednesday & Friday ran 30 it H1= A significant difference e: Wednesday & Friday 13 iterat STD DEV 95% CI LOW	tions) total time a paray ran 30 iterations)  exist between the metions) total time a paray ran 30 iterations)  MODEL(8)  18.41  22.40  1606  ference between the ions) total time a parations) total	tient waits to see a PCP ar total time a patient waits for an of the FY99 FCC Status tient waits to see a PCP ar total time a patient waits for .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TRUE TRUE TRUE TRUE TRUE TRUE TRUE TRU	nd the mean of the or a PCP.  S Qou Model's (Tue of the mean of the r PCP.  Z-TEST  MODEL(13) 1606 18.41 22.40  = 0.36  Fail To Reject Ho latus Qou Model's (Tues one of the FCC Model's (Tues one of the FCC Model of the FCC Mode	FCC Model sday, FCC Model  MODEL(30 3638 18:15 27:74  Tuesday, lodel (Tuesday odel (Tuesday odel (Tuesday odel (Tuesday

## Comparison of Alternative-One Models with FY99 FCC Status Quo Models (wait times)

WAITS TO BE			Alternative-One	FY99 Status Quo		
EXAMED	M/TH (Alt-1)	T/W/F (Alt-1)	Models		MITU (9)	TANIC 10-
MEAN	19.01	19.46	19.28	Models (Base) 24.80	M/TH (Base) 23.41	T/W/F (Base
MEDIAN	18.46	18.72	18.62	24.80 22.80		25.73
MIN	1.67	1.59	1.59	22.00 1.3	21.91	23.39
MAX	319.98	299.98	319.98	1.5 370.4	1.93	1.3
STD DEV	53.05	49.73	519.96 53.07	570.4 61.52	241.1	370.4
95% CI LOW	18.39	18.91	18.70	61.52 23.47	39.86	61.52
95% CI HIGH	19.63	20.02	19.86	23,47 26.13	22.24	24.29
SAMPLE SIZE	14567	20,02 21683	36250		24.59	27.17
IME PATIENT IN		21000	30230	36231	14570	21661
CLINIC						
MEAN	71.2	73.13	72.35	80.59	70 70	04.04
MEDIAN	70.15	72.38	71.48	80.59 78.11	78.72 76.64	81.84
MIN	70.15 17.62	15.95	71.46 15.95	76.11 17.57	76.64 17.79	79.1
MAX	334.2	324.42	334.20	17.57 391.53	17.79 287.9	17.57
STD DEV	52.76	51.41	53.04	591.53 62.33	267.9 45.02	391.53 62.33
95% CI LOW	69.97	72.09	71.24	78.40	45.02 76.55	62.33 79.64
95% CI HIGH	72.43	74.17	73.47	76.40 82.77	76.55 80.9	79.04 84.03
SAMPLE SIZE	14567	21683	36250	36231	60.9 14570	64.03 21661
EXAMED	H1= A significant sta	itistical difference e	xist between the mea	n of the FY 99 FCC Statu	is Quo Models' total ti	ime a patient wa
Level of	to see a PCP and th	itistical difference e e mean of the Alter	native-One Models' to	otal time a patient waits to	see a PCP.	ine a patient wa
Level of ignificance .05	to see a PCP and th	itistical difference e e mean of the Alter	native-One Models' to FY99 Base	n of the FY 99 FCC Statuotal time a patient waits to .05 SIG =Z=+ OR -1.96	is Quo Models' total ti o see a PCP. Z-TEST	ime a patient wa
Level of lignificance .05	to see a PCP and th	itistical difference e e mean of the Alter	native-One Models' to FY99 Base 24.80	otal time a patient waits to	see a PCP. Z-TEST	
Level of ignificance .05	to see a PCP and th  MEAN  MEDIAN	itistical difference e e mean of the Alter	native-One Models' to FY99 Base 24:80 22:80	otal time a patient waits to	see a PCP.  Z-TEST  FY99 Base	. Alt-1
Level of lignificance .05 19.28 18.62	to see a PCP and th  MEAN  MEDIAN  STD DEV	itistical difference e e mean of the Alter	native-One Models' to FY99 Base 24.80 22.80 61.52	otal time a patient waits to .05 SIG =Z=+ OR -1.96 SAMPLE SIZE	see a PCP.  Z-TEST  FY99 Base 36250	Alt-1 36250
Level of ignificance .05 19.28 18.62 53.07	to see a PCP and th  MEAN  MEDIAN	itistical difference e e mean of the Alter	native-One Models' to FY99 Base 24.80 22.80 61.52 23.47	otal time a patient waits to .05 SIG =Z=+ OR -1.96 SAMPLE SIZE MEAN	See a PCP.  Z-TEST  FY99 Base 36250 24.80	Alt-1 36250 19.28
Level of ignificance .05 19.28 18.62 53.07 18.70	to see a PCP and th  MEAN  MEDIAN  STD DEV  95% CI LOW	itistical difference e e mean of the Alter	native-One Models' to FY99 Base 24.80 22.80 61.52 23.47 26.13	otal time a patient waits to .05 SIG =Z=+ OR -1.96 SAMPLE SIZE	see a PCP.  Z-TEST  FY99 Base 36250	Alt-1 36250
Level of ignificance .05 19.28 18.62 53.07 18.70 19.86	to see a PCP and th  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	itistical difference e e mean of the Alter	native-One Models' to FY99 Base 24.80 22.80 61.52 23.47	otal time a patient waits to .05 SIG =Z=+ OR -1.96 SAMPLE SIZE MEAN STD DEV	See a PCP.  Z-TEST  FY99 Base 36250 24.80 61.52	Alt-1 36250 19.28
Level of ignificance .05 19.28 18.62 53.07 18.70 19.86	to see a PCP and th  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	itistical difference e e mean of the Alter	native-One Models' to FY99 Base 24.80 22.80 61.52 23.47 26.13	otal time a patient waits to .05 SIG =Z=+ OR -1.96 SAMPLE SIZE MEAN STD DEV	E-12.93	Alt-1 36250 19.28
Level of ignificance .05 19.28 18.62 53.07 18.70 19.86 36250	to see a PCP and th  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign patient is in the FCC	e mean of the Alter  ificant statistical diff and the mean of th	native-One Models' to FY99 Base 24:80 22:80 61:52 23:47 26:13 36250 Ference between the ine Alternative-One Mo	otal time a patient waits to  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE  MEAN  STD DEV  TR=  mean of the FY 99 FCC 5  redis' total time a patient is	Estatus Quo Models' mission to the clinic.	Alt-1 36250 19.28 53.07 ean total time a
Level of Significance :05 19:28 18:62 53:07 18:70 19:86 36250 IME PATIENT IN SYSTEM	to see a PCP and th  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign patient is in the FCC H1= A significant sta	e mean of the Alter ificant statistical diff and the mean of th tistical difference ex	rative-One Models' to FY99 Base 24:80 22:80 61:52 23:47 26:13 36250 Ference between the real of the Models' to	otal time a patient waits to  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE  MEAN  STD DEV  TR=  mean of the FY 99 FCC Sedis' total time a patient is n of the FY 99 FCC Statu	FY99 Base 36250 24.80 61.52  12.93  Reject Ho Status Quo Models' me s in the clinic. S Quo Models' mean t	Alt-1 36250 19.28 53.07 ean total time a
Level of ignificance .05 19.28 18.62 53.07 18.70 19.86 36250  ME PATIENT IN SYSTEM  Level of	to see a PCP and th  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign patient is in the FCC H1= A significant sta	e mean of the Alter ificant statistical diff and the mean of th tistical difference ex	rative-One Models' to FY99 Base 24:80 22:80 61:52 23:47 26:13 36250 Ference between the real of the Models' to	otal time a patient waits to  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE  MEAN  STD DEV  TR=  mean of the FY 99 FCC 5  redis' total time a patient is	FY99 Base 36250 24.80 61.52  12.93  Reject Ho Status Quo Models' me s in the clinic. S Quo Models' mean t	Alt-1 36250 19.28 53.07 ean total time a
Level of ignificance .05 19.28 18.62 53.07 18.70 19.86 36250  ME PATIENT IN SYSTEM  Level of	to see a PCP and th  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign patient is in the FCC H1= A significant sta	e mean of the Alter ificant statistical diff and the mean of th tistical difference ex	rative-One Models' to FY99 Base 24.80 22.80 61.52 23.47 26.13 36250  Perence between the real earlive-One Models' to	otal time a patient waits to  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE  MEAN  STD DEV  TR=  mean of the FY 99 FCC Statu tal time a patient is in the	FY99 Base 36250 24.80 61.52  12.93 Reject Ho Status Quo Models' me s in the clinic. S Quo Models' mean t	Alt-1 36250 19.28 53.07 ean total time a
Level of ignificance .05 19.28 18.62 53.07 18.70 19.86 36250  ME PATIENT IN SYSTEM  Level of ignificance .05	to see a PCP and th  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign patient is in the FCC H1= A significant stalls in the FCC and the	e mean of the Alter ificant statistical diff and the mean of th tistical difference ex	rative-One Models' to FY99 Base 24.80 22.80 61.52 23.47 26.13 36250 Ference between the real e Alternative-One Models' to FY99 Base	otal time a patient waits to  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE  MEAN  STD DEV  TR=  mean of the FY 99 FCC Sedis' total time a patient is n of the FY 99 FCC Statu	FY99 Base 36250 24.80 61.52  12.93  Reject Ho Status Quo Models' me s in the clinic. S Quo Models' mean t	Alt-1 36250 19.28 53.07 ean total time a
Level of ignificance .05  19.28 18.62 53.07 18.70 19.86 36250  ME PATIENT IN SYSTEM  Level of ignificance .05	to see a PCP and the  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign patient is in the FCC H1= A significant state is in the FCC and the	e mean of the Alter ificant statistical diff and the mean of th tistical difference ex	rative-One Models' to  FY99 Base 24.80 22.80 61.52 23.47 26.13 36250  Ference between the real of the Models' to the Models' t	otal time a patient waits to  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE  MEAN  STD DEV  TR=  mean of the FY 99 FCC Statu tal time a patient is in the	FY99 Base 36250 24.80 61.52  12.93 Reject Ho Status Quo Models' mo s in the clinic. Quo Models' mean t	Alt-1 36250 19.28 53.07 ean total time a
Level of ignificance .05  19.28 18.62 53.07 18.70 19.86 36250  ME PATIENT IN SYSTEM  Level of ignificance .05 72.35 71.48	MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign patient is in the FCC H1= A significant sta is in the FCC and the	e mean of the Alter ificant statistical diff and the mean of th tistical difference ex	rative-One Models' to FY99 Base 24:80 22:80 61:52 23:47 26:13 36250 Ference between the real Alternative-One Models' to FY99 Base 80:59 78:11	otal time a patient waits to .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR= mean of the FY 99 FCC Statu tal time a patient is in the .05 SIG =Z=+ OR -1.96	FY99 Base 36250 24.80 61.52  12.93 Reject Ho Status Quo Models' me s in the clinic. S Quo Models' mean t clinic. Z-TEST  FY99 Base	Alt-1 36250 19.28 53.07 ean total time a otal time a patie
Level of ignificance .05 19.28 18.62 53.07 18.70 19.86 36250  ME PATIENT IN SYSTEM  Level of ignificance .05 72.35 71.48 53.04	MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign patient is in the FCC H1= A significant sta is in the FCC and the MEAN MEDIAN STD DEV	e mean of the Alter ificant statistical diff and the mean of th tistical difference ex	rative-One Models' to FY99 Base 24.80 22.80 61.52 23.47 26.13 36250 Ference between the real Alternative-One Models' to FY99 Base 80.59 78.11 62.33	otal time a patient waits to  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE  MEAN STD DEV  TR=  mean of the FY 99 FCC Sizedis' total time a patient is in the  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE	FY99 Base 36250 24.80 61.52  12.93 Reject Ho Status Quo Models' me s' in the clinic. S Quo Models' mean t clinic.  Z-TEST  FY99 Base 36231	Alt-1 36250 19.28 53.07 ean total time a otal time a patie Alt-1 36250
Level of ignificance .05  19.28 18.62 53.07 18.70 19.86 36250  ME PATIENT IN SYSTEM  Level of ignificance .05 72.35 71.48 53.04 71.24	MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign patient is in the FCC H1= A significant state is in the FCC and the MEAN MEDIAN STD DEV 95% CI LOW	e mean of the Alter ificant statistical diff and the mean of th tistical difference ex	rative-One Models' to FY99 Base 24.80 22.80 61.52 23.47 26.13 36250 Ference between the real Alternative-One Models' to FY99 Base 80.59 78.11 62.33	otal time a patient waits to .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR= mean of the FY 99 FCC Sizedis' total time a patient is in the .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN	FY99 Base 36250 24.80 61.52 4.12.93 Reject Ho Status Quo Models' mean to clinic.  Z-TEST  FY99 Base 36231 80.59	Alt-1 36250 19.28 53.07 ean total time a cotal time a patie Alt-1 36250 72.35
Level of ignificance .05  19.28 18.62 53.07 18.70 19.86 36250  ME PATIENT IN SYSTEM  Level of ignificance .05 72.35 71.48 53.04 71.24 73.47	MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign patient is in the FCC H1= A significant state is in the FCC and the MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	e mean of the Alter ificant statistical diff and the mean of th tistical difference ex	rative-One Models' to FY99 Base 24.80 22.80 61.52 23.47 26.13 36250  Ference between the real Alternative-One Models' to FY99 Base 80.59 78.11 62.33 78.40 82.77	otal time a patient waits to  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE  MEAN STD DEV  TR=  mean of the FY 99 FCC Sizedis' total time a patient is in the  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE	FY99 Base 36250 24.80 61.52  12.93 Reject Ho Status Quo Models' me s' in the clinic. S Quo Models' mean t clinic.  Z-TEST  FY99 Base 36231	Alt-1 36250 19.28 53.07 ean total time a otal time a patie Alt-1 36250
Level of ignificance .05  19.28 18.62 53.07 18.70 19.86 36250  ME PATIENT IN SYSTEM  Level of ignificance .05 72.35 71.48 53.04 71.24	MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no sign patient is in the FCC H1= A significant state is in the FCC and the MEAN MEDIAN STD DEV 95% CI LOW	e mean of the Alter ificant statistical diff and the mean of th tistical difference ex	rative-One Models' to FY99 Base 24.80 22.80 61.52 23.47 26.13 36250 Ference between the real Alternative-One Models' to FY99 Base 80.59 78.11 62.33	otal time a patient waits to .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR= mean of the FY 99 FCC Siedis' total time a patient is in the .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV	FY99 Base 36250 24.80 61.52 4.12.93 Reject Ho Status Quo Models' mean to clinic.  Z-TEST  FY99 Base 36231 80.59	Alt-1 36250 19.28 53.07 ean total time a cotal time a patier Alt-1 36250 72.35

Comparison of Alternative-Two Models with FY99 Status Quo Models (wait times)

TIME PATIEN WAITS TO BE	G 2 3 2 15% 3 15 6 6 7 6 6 7 4 7 4 7 4 7 4 7 4 7 4 7 4 7		Alternative-	EVAN ECO OTATIO OUG		١.
EXAMED	WTH (Alt-2)	T/W/F (Alt-2)	Two Models	FY99 FGC STATUS QUO (Base)	MITH (Dees)	TABUT US-
MEAN	14.1	14.67	14.44	(Base) 24.80	M/TH (Base) 23.41	T/W/F (Ba 25.73
MEDIAN	13.99	14.02	14.01	22.80	21.91	23.73
MIN	1.32	1.61	1.66	13	1.93	1.3
MAX	186.76	279.21	268.46	370.4	241.1	370.4
STD DEV	30.91	46.27	44.47	61.52	39.86	61.52
95% CI LOW	51 65 44 64 65 5 1 M	14.28	14.09	23.47	22.24	24.29
95% CI HIGH		15.06	14.80	<b>26.13</b>	24.59	27.17
SAMPLE SIZE		10792	18042	36231	14570	21661
TME PATIENT						
IN CLINIC						
MEAN	69.82	75.91	73.46	80.59	78.72	81.84
MEDIAN	68.85	74.62	72.30	<b>78.</b> 11	76.64	79.1
MIN	18.09	15.49	18.09	17:57	17.79	17.57
MAX	294.1	337.41	337.41	391.53	287.9	391.53
STD DEV	46.00	53.65	53.22	62,33	45.02	62.33
95% CI LOW	68.71	74.7	72.29	78.40	76.55	79.64
95% CI HIGH	70.93	77.13	74.64	82.77	80.9	84.03
SAMPLE SIZE	7250	10792	18042	36231	14570	21661
VAITS TO BE EXAMED Level of Significance	H1= A significant	statistical differen	ice exist betwee	n the mean of the FY99 FCC Stat Two Models' total time a patient v	us Quo Models' tol	al time a pa
VAITS TO BE EXAMED Level of Significance .05	H1= A significant waits to see a PC	statistical differen	ice exist betwee of the Alternative FY99 Base	n the mean of the FY99 FCC Stat	us Quo Models' tol	al time a pat
VAITS TO BE EXAMED Level of Significance .05	H1= A significant waits to see a PC MEAN	statistical differen	nce exist betwee of the Alternative FY99 Base 24.80	n the mean of the FY99 FCC Stat Two Models' total time a patient v	us Quo Models' tol vaits to see a PCP Z-TEST	
VAITS TO BE EXAMED Level of Significance .05 14.44 14.01	H1= A significant waits to see a PC MEAN MEDIAN	statistical differen	nce exist betwee of the Alternative FY99 Base 24.80 22.80	n the mean of the FY99 FCC Stat Two Models' total time a patient v .05 SIG =Z=+ OR -1.96	us Quo Models' tol vaits to see a PCP Z-TEST FY99 Base	Ait-2
VAITS TO BE EXAMED Level of Significance .05 14.44 14.01 44.47	H1= A significant waits to see a PC MEAN MEDIAN STD DEV	statistical differen	nce exist betwee of the Alternative FY99 Base 24.80 22.80 61.52	n the mean of the FY99 FCC Stat Two Models' total time a patient v .05 SIG =Z≕+ OR -1.96 SAMPLE SIZE	us Quo Models' tol vaits to see a PCP Z-TEST FY99 Base 36231	Alt-2 18042
VAITS TO BE EXAMED Level of Significance .05 14.44 14.01 44.47 14.09	H1= A significant waits to see a PC MEAN MEDIAN STD DEV 95% CI LOW	statistical differen	rice exist between of the Alternative FY99 Base 24.80 22.80 61.52 23.47	n the mean of the FY99 FCC Stat Two Models' total time a patient v .05 SIG =Z⇒+ OR -1.96 SAMPLE SIZE MEAN	us Quo Models' tol vaits to see a PCP Z-TEST FY99 Base 36231 24.80	Alt-2 18042 14.44
VAITS TO BE EXAMED Level of Significance .05 14.44 14.01 44.47	H1= A significant waits to see a PC MEAN MEDIAN STD DEV	statistical differen	nce exist betwee of the Alternative FY99 Base 24.80 22.80 61.52	n the mean of the FY99 FCC Stat Two Models' total time a patient v .05 SIG =Z≕+ OR -1.96 SAMPLE SIZE	us Quo Models' tol vaits to see a PCP Z-TEST FY99 Base 36231	Alt-2 18042
VAITS TO BE EXAMED Level of Significance .05 14.44 14.01 44.47 14.09 14.80	H1= A significant waits to see a PC MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	statistical differen	rice exist between the Alternative FY99 Base 24.80 22.80 61.52 23.47 26.13	n the mean of the FY99 FCC Stat Two Models' total time a patient v .05 SIG =Z⇒+ OR -1.96 SAMPLE SIZE MEAN STD DEV	us Quo Models' tol vaits to see a PCP Z-TEST FY99 Base 36231 24.80 61.52	Alt-2 18042 14.44
VAITS TO BE EXAMED Level of Significance .05 14.44 14.01 44.47 14.09 14.80	H1= A significant waits to see a PC MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE	statistical difference	rice exist between fithe Alternative FY99 Base 24.80 22.80 61.52 23.47 26.13 36231	n the mean of the FY99 FCC Stat Two Models' total time a patient v .05 SIG =Z=+ OR -1.96 SAMPLE SIZE MEAN STD DEV	us Quo Models' tol vaits to see a PCP Z-TEST FY99 Base 36231 24.80 61.52 22.39 Reject Ho	Alt-2 18042 14.44 44.47
VAITS TO BE EXAMED Level of Significance .05 14.44 14.01 44.47 14.09 14.80 18042	H1= A significant waits to see a PC MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s	statistical difference in and the mean of	rice exist between fithe Alternative FY99 Base 24.80 22.80 61.52 23.47 26.13 36231	n the mean of the FY99 FCC Stat Two Models' total time a patient v .05 SIG =Z⇒+ OR -1.96 SAMPLE SIZE MEAN STD DEV	us Quo Models' tol vaits to see a PCP  Z-TEST  FY99 Base 36231 24.80 61.52  22.39  Reject Ho Status Quo Models	Alt-2 18042 14.44 44.47
VAITS TO BE EXAMED Level of Significance .05 14.44 14.01 44.47 14.09 14.80 18042	H1= A significant waits to see a PC MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in	statistical difference P and the mean of ignificant statistica the FCC and the	rice exist between of the Alternative FY99 Base 24.80 22.80 61.52 23.47 26.13 36231 al difference between of the Alternative exist between	n the mean of the FY99 FCC State Two Models' total time a patient volume is patient volume.  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE  MEAN  STD DEV  TR=  ween the mean of the FY99 FCC	us Quo Models' tol vaits to see a PCP  Z-TEST  FY99 Base 36231 24.80 61.52  22.39  Reject Ho Status Quo Models patient is in the clir	Alt-2 18042 14.44 44.47 s' mean tota nic.
VAITS TO BE EXAMED  Level of Significance .05  14.44 14.01 44.47 14.09 14.80 18042  ME PATIENT N SYSTEM  Level of significance	H1= A significant waits to see a PC  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s time a patient is in	statistical difference P and the mean of ignificant statistica the FCC and the	rice exist between of the Alternative FY99 Base 24.80 22.80 61.52 23.47 26.13 36231 al difference between of the Alternative exist between	n the mean of the FY99 FCC State Two Models' total time a patient volume is patient volume.  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR= ween the mean of the FY99 FCC emative-Two Models' total time a patient of the FY99 FCC States-Two Models' total time a patient	us Quo Models' tol vaits to see a PCP Z-TEST  FY99 Base 36231 24.80 61.52  22.39  Reject Ho Status Quo Models patient is in the clir us Quo Models' me is in the clinic.	Alt-2 18042 14.44 44.47 s' mean tota nic.
VAITS TO BE EXAMED  Level of Significance .05  14.44 14.01 44.47 14.09 14.80 18042  ME PATIENT N SYSTEM  Level of ignificance	H1= A significant waits to see a PC  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s time a patient is in	statistical difference P and the mean of ignificant statistica the FCC and the	FY99 Base 24.80 22.80 61.52 23.47 26.13 36231  al difference beto mean of the Altoce exist betweer of the Alternative	n the mean of the FY99 FCC State Two Models' total time a patient volume is patient volume.  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR= ween the mean of the FY99 FCC emative-Two Models' total time a patient of the FY99 FCC States-Two Models' total time a patient	us Quo Models' tol vaits to see a PCP  Z-TEST  FY99 Base 36231 24.80 61.52  22.39  Reject Ho Status Quo Models patient is in the clir	Alt-2 18042 14.44 44.47 s' mean tota nic.
VAITS TO BE EXAMED  Level of Significance .05  14.44 14.01 44.47 14.09 14.80 18042  ME PATIENT N SYSTEM  Level of significance .05	H1= A significant waits to see a PC MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in H1= A significant patient is in the FC	statistical difference P and the mean of ignificant statistica the FCC and the	rice exist between of the Alternative FY99 Base 24.80 22.80 61.52 23.47 26.13 36231 al difference between of the Alternative FY00 Base	n the mean of the FY99 FCC State Two Models' total time a patient volume is patient volume.  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR= ween the mean of the FY99 FCC emative-Two Models' total time a patient of the FY99 FCC States-Two Models' total time a patient	us Quo Models' tol vaits to see a PCP Z-TEST  FY99 Base 36231 24.80 61.52  22.39  Reject Ho Status Quo Models' me is in the clinic.  Z-TEST	Alt-2 18042 14.44 44.47 s' mean totalic.
VAITS TO BE EXAMED  Level of Significance .05  14.44 .14.01 .44.47 .14.09 .14.80 .18042  WE PATIENT N SYSTEM  Level of ignificance .05  73.46 .72.30 .53.22	H1= A significant waits to see a PC MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in H1= A significant patient is in the FC	statistical difference P and the mean of ignificant statistica the FCC and the	rice exist between of the Alternative FY99 Base 24.80 22.80 61.52 23.47 26.13 36231 all difference between of the Alternative FY00 Base 80.59 78.11	n the mean of the FY99 FCC State Two Models' total time a patient volume is patient volume.  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR= ween the mean of the FY99 FCC emative-Two Models' total time a patient of the FY99 FCC States-Two Models' total time a patient	us Quo Models' tol vaits to see a PCP Z-TEST  FY99 Base 36231 24.80 61.52  22.39  Reject Ho Status Quo Models' me is in the clinic.  Z-TEST  FY00 Base	Alt-2 18042 14.44 44.47 s' mean totalic. ean total time
VAITS TO BE EXAMED  Level of Significance .05  14.44 .14.01 .44.47 .14.09 .14.80 .18042  WE PATIENT N SYSTEM  Level of ignificance .05  73.46 72.30	H1= A significant waits to see a PC  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  H0= There is no s time a patient is in the FC  MEAN MEDIAN	statistical difference P and the mean of ignificant statistica the FCC and the	rice exist between of the Alternative FY99 Base 24.80 22.80 61.52 23.47 26.13 36231 all difference between of the Alternative FY00 Base 80.59 78.11 62.33	n the mean of the FY99 FCC State of two Models' total time a patient v  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR= ween the mean of the FY99 FCC emative-Two Models' total time a  the mean of the FY99 FCC State a-Two Models' total time a patient .05 SIG =Z=+ OR -1.96	us Quo Models' tot vaits to see a PCP  Z-TEST  FY99 Base 36231 24.80 61.52  22.39  Reject Ho Status Quo Models' me is in the clinic.  Z-TEST  FY00 Base 36231	Alt-2 18042 14.44 44.47 s' mean total ric. aan total time Alt-2 18042
VAITS TO BE EXAMED  Level of Significance .05  14.44 .14.01 .44.47 .14.09 .14.80 .18042  WE PATIENT N SYSTEM  Level of ignificance .05  73.46 .72.30 .53.22	H1= A significant waits to see a PC MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s time a patient is in H1= A significant patient is in the FC MEAN MEDIAN STD DEV	statistical difference P and the mean of ignificant statistica the FCC and the	rice exist between of the Alternative FY99 Base 24.80 22.80 61.52 23.47 26.13 36231 all difference between of the Alternative FY00 Base 80.59 78.11 62.33 78.40	n the mean of the FY99 FCC State of two Models' total time a patient v  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN STD DEV  TR= ween the mean of the FY99 FCC semative-Two Models' total time a  of the mean of the FY99 FCC State of two Models' total time a patient  .05 SIG =Z=+ OR -1.96  SAMPLE SIZE	us Quo Models' tol vaits to see a PCP Z-TEST  FY99 Base 36231 24.80 61.52  22.39  Reject Ho Status Quo Models' me is in the clinic.  Z-TEST  FY00 Base	Alt-2 18042 14.44 44.47 s' mean total fic. ean total time Alt-2 18042 73.46
VAITS TO BE EXAMED  Level of Significance .05  14.44 14.01 44.47 14.09 14.80 18042  ME PATIENT N SYSTEM  Level of significance .05  73.46 72.30 53.22 72.29	H1= A significant waits to see a PC MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  H0= There is no s time a patient is in the FC MEAN MEDIAN STD DEV 95% CI LOW	statistical difference P and the mean of ignificant statistica the FCC and the	rice exist between of the Alternative FY99 Base 24.80 22.80 61.52 23.47 26.13 36231 all difference between of the Alternative FY00 Base 80.59 78.11 62.33 78.40	n the mean of the FY99 FCC State Two Models' total time a patient volume a	us Quo Models' tot vaits to see a PCP  Z-TEST  FY99 Base 36231 24.80 61.52  22.39  Reject Ho Status Quo Models' me is in the clinic.  Z-TEST  FY00 Base 36231 80.59	Alt-2 18042 14.44 44.47 s' mean total nic. aan total time Alt-2 18042

Comparison of Alternative-Three Models with FY99 FCC Status Quo Models (wait times)

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WAITS TO BE			Alternative-	FY99 STATUS QUO MODEL		
EXAMED	M/TH (Alt-3)	T/W/F (Alt-3)	Three Models	(BASE)	M/TH (Base)	T/W/F(Bas
MEAN	19.87	21.55	20.88	24.80	23.41	25.73
MEDIAN	19.53	20.44	20.07	22.80	21.91	23.39
MIN	1.06	0.92	0.92	1.3	1.93	1.3
MAX	182.33	186.27	186.27	370.4	4.3	
STD DEV	30.21	30.89	30.89	61.52	241.1	370.4
95% CI LOW		20.84	20.25	4. 54000A() ( ) ( ) 4. 多音连续 ( ) 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	39.86	61.52
95% CI HIGH		22,26	2. 第1. 4. 5.5 \$P\$ 20.0 \$P\$ 15. 5	23.47	22.24	24.29
SAMPLE SIZE		1. 1878 (C.M.C.	21.50	26.13	24.59	27.17
SAMIFLE SIZE	1250	10792	18042	36231	14570	21661
	_					•
TIME PATIENT	ſ	- MARAYA Marika			Wall they are	
IN CLINIC						
MEAN	57.88	60.63	59.53	80.59	78.72	81.84
MEDIAN	57.68	59.97	59.05	78.11	76.64	79.1
MIN	16.62	13.48	13.48	17.57	17.79	17.57
MAX	215.62	98.23	215.62	391.53	287.9	391.53
STD DEV	33.17	14.13	33.69	62.33	45.02	62.33
95% CI LOW	57.12	59.7	58.66	78.40	76.55	79.64
95% CI HIGH	58.63	61.56	60.38	82.77	80.9	84.03
SAMPLE SIZE	7250	10792	18042	36231	14570	21661
	Ho= There is no	significant statistic	al difference bety	veen the mean of the FY99 FCC :		total time a
IME PATIENT	patient waits to s	ee a PCP and the	mean of the Alte	ernatie-Three Models' total time a l	patient waits to see	a PCP
WAITS TO BE	•					
EXAMED						200
	H1= A significant	statistical differen	nce exist between	the mean of the FY99 FCC Statu	e Oug total time a	nationt materi
Level of	see a PCP and th	ne mean of the Al	ternative-Three M	lodels' total time a patient waits to	see a PCP	patient waits
Significance					Sec a i Ci .	
.05				일본 사람이 나는 그는 가장 가득하다.		
			. 124 - 65 - 64 3 / 1 / 16	되었어도 그 바다 가는 것이 없었다.		
			EVOC Poco	05 SIC -7-1 OD 4 66	3.7507	
20.88	MEAN		一点,有色质的是特别的"沙鸡"的	.05 SIG =Z=+ OR -1.96	Z-TEST	
20.88	MEAN MEDIAN		24.80	.05 SIG =Z=+ OR -1.96		
20.07	MEDIAN		24.80 22.80		FY99 Base	Alt-3
20.07 30.89	MEDIAN STD DEV		24.80 22.80 61.52	SAMPLE SIZE	FY99 Base 36231	18042
20.07 30.89 20.25	MEDIAN STD DEV 95% CI LOW		24.80 22.80 61.52 23.47	SAMPLE SIZE MEAN	FY99 Base 36231 24.80	
20.07 30.89 20.25 21.50	MEDIAN STD DEV 95% CI LOW 95% CI HIGH		24.80 22.80 61.52 23.47 26	SAMPLE SIZE	FY99 Base 36231	18042
20.07 30.89 20.25	MEDIAN STD DEV 95% CI LOW		24.80 22.80 61.52 23.47	SAMPLE SIZE MEAN	FY99 Base 36231 24.80	18042 20.88
20.07 30.89 20.25 21.50	MEDIAN STD DEV 95% CI LOW 95% CI HIGH		24.80 22.80 61.52 23.47 26	SAMPLE SIZE MEAN STD DEV	FY99 Base 36231 24.80	18042 20.88
20.07 30.89 20.25 21.50	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE		24.80 22.80 61.52 23.47 26 36231	SAMPLE SIZE MEAN STD DEV TR=	FY99 Base 36231 24.80 61.52 9.89	18042 20.88 30.89
20.07 30.89 20.25 21.50 18042	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s	ignificant statistic	24,80 22,80 61,52 23,47 26 36231	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC S	FY99 Base 36231 24.80 61.52 9.89 Reject Ho	18042 20.88 30.89
20.07 30.89 20.25 21.50 18042	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s	ignificant statistic the FCC and the	24,80 22,80 61,52 23,47 26 36231	SAMPLE SIZE MEAN STD DEV	FY99 Base 36231 24.80 61.52 9.89 Reject Ho	18042 20.88 30.89
20.07 30.89 20.25 21.50 18042	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s	ignificant statistic the FCC and the	24,80 22,80 61,52 23,47 26 36231	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC S	FY99 Base 36231 24.80 61.52 9.89 Reject Ho	18042 20.88 30.89
20.07 30.89 20.25 21.50 18042	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s	ignificant statistic the FCC and the	24,80 22,80 61,52 23,47 26 36231	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC S	FY99 Base 36231 24.80 61.52 9.89 Reject Ho	18042 20.88 30.89
20.07 30.89 20.25 21.50 18042 IME PATIENT IN SYSTEM	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231 al difference betwe mean of the Alte	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Simultive-Three Models' total time a	FY99 Base 36231 24:80 61:52 9:89 Reject Ho status Quo Models' patient is in the cli	18042 20.88 30.89 mean total nic.
20.07 30.89 20.25 21.50 18042 IME PATIENT IN SYSTEM	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231 al difference betwe mean of the Alte	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Simultive-Three Models' total time a	FY99 Base 36231 24:80 61:52 9:89 Reject Ho status Quo Models' patient is in the cli	18042 20.88 30.89 mean total nic.
20.07 30.89 20.25 21.50 18042 IME PATIENT IN SYSTEM	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231 al difference betwe mean of the Alte	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC S rmative-Three Models' total time a	FY99 Base 36231 24:80 61:52 9:89 Reject Ho status Quo Models' patient is in the cli	18042 20.88 30.89 mean total nic.
20.07 30.89 20.25 21.50 18042 IME PATIENT IN SYSTEM	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231 al difference betwe mean of the Alte	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Simultive-Three Models' total time a	FY99 Base 36231 24:80 61:52 9:89 Reject Ho status Quo Models' patient is in the cli	18042 20.88 30.89 mean total nic.
20.07 30.89 20.25 21.50 18042 IME PATIENT IN SYSTEM	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in	the FCC and the statistical differen	24,80 22.80 61.52 23.47 26 36231  al difference between mean of the Alternative	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Signative-Three Models' total time a the mean of the AFY99 FCC Stat -Three Models' total time a patient	FY99 Base 36231 24.80 61.52  9.89  Reject Ho Status Quo Models' patient is in the clin us Quo Models' met	18042 20.88 30.89 mean total nic.
20.07 30.89 20.25 21.50 18042 IME PATIENT IN SYSTEM Level of Significance .05	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in H1= A significant: patient is in the FO	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231 al difference between mean of the Alternative	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Simultive-Three Models' total time a	FY99 Base 36231 24:80 61:52 9:89 Reject Ho status Quo Models' patient is in the cli	18042 20.88 30.89 mean total nic.
20.07 30.89 20.25 21.50 18042 ME PATIENT IN SYSTEM Level of Significance .05	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in H1= A significant patient is in the FO	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231 al difference between mean of the Alternative  FY99 Base 80,59	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Signative-Three Models' total time a the mean of the AFY99 FCC Stat -Three Models' total time a patient	FY99 Base 36231 24.80 61.52 9.89 Reject Ho Status Quo Models' patient is in the clin us Quo Models' met is in the clinic.	18042 20.88 30.89 mean total nic.
20.07 30.89 20.25 21.50 18042 ME PATIENT IN SYSTEM  Level of Significance .05  59.53 59.05	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in H1= A significant is patient is in the FO	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231 al difference between mean of the Alternative  FY99 Base 80,59 78,11	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Signative-Three Models' total time a the mean of the AFY99 FCC Stat -Three Models' total time a patient	FY99 Base 36231 24.80 61.52 9.89 Reject Ho Status Quo Models' patient is in the clin us Quo Models' me t is in the clinic.  Z-TEST FY99 Base	18042 20.88 30.89 mean total nic.
20.07 30.89 20.25 21.50 18042 ME PATIENT IN SYSTEM Level of Significance .05 59.53 59.05 33.69	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in H1= A significant is patient is in the FO  MEAN MEDIAN STD DEV	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231  al difference between of the Alternative  FY99 Base 80,59 78,11 62,33	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Structive-Three Models' total time a the mean of the AFY99 FCC Stat -Three Models' total time a patient  05 SIG =Z=+ OR -1.96  SAMPLE SIZE	FY99 Base 36231 24.80 61.52 9.89 Reject Ho Status Quo Models' patient is in the clin us Quo Models' me t is in the clinic.  Z-TEST FY99 Base 36231	18042 20.88 30.89 mean total nic. Alt-3 18042
20.07 30.89 20.25 21.50 18042 ME PATIENT IN SYSTEM  Level of Significance .05  59.53 59.05 33.69 58.66	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in H1= A significant is patient is in the FO  MEAN MEDIAN STD DEV 95% CI LOW	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231  al difference between of the Alternative  FY99 Base 80,59 78,11 62,33 78,40	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Structive-Three Models' total time a the mean of the AFY99 FCC Stat -Three Models' total time a patient  05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN	FY99 Base 36231 24.80 61.52 9.89 Reject Ho status Quo Models' patient is in the clin us Quo Models' me t is in the clinic.  Z-TEST  FY99 Base 36231 80.59	18042 20.88 30.89 mean total nic. Alt-3 18042 59.53
20.07 30.89 20.25 21.50 18042 ME PATIENT IN SYSTEM  Level of Significance .05  59.53 59.05 33.69 58.66 60.38	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s time a patient is in  H1= A significant is patient is in the FO  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231  al difference between of the Alternative  FY99 Base 80,59 78,11 62,33 78,40 82,77 5	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Structive-Three Models' total time a the mean of the AFY99 FCC Stat -Three Models' total time a patient  05 SIG =Z=+ OR -1.96  SAMPLE SIZE	FY99 Base 36231 24.80 61.52 9.89 Reject Ho Status Quo Models' patient is in the clin us Quo Models' me t is in the clinic.  Z-TEST FY99 Base 36231	18042 20.88 30.89 mean total nic. Alt-3 18042
20.07 30.89 20.25 21.50 18042 ME PATIENT IN SYSTEM  Level of Significance .05  59.53 59.05 33.69 58.66 60.38	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s time a patient is in H1= A significant is patient is in the FO  MEAN MEDIAN STD DEV 95% CI LOW	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231  al difference between of the Alternative  FY99 Base 80,59 78,11 62,33 78,40	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Structive-Three Models' total time a the mean of the AFY99 FCC Stat -Three Models' total time a patient  05 SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN	FY99 Base 36231 24.80 61.52 9.89 Reject Ho status Quo Models' patient is in the clin us Quo Models' me t is in the clinic.  Z-TEST  FY99 Base 36231 80.59	18042 20.88 30.89 mean total nic. Alt-3 18042 59.53
20.07 30.89 20.25 21.50 18042 ME PATIENT IN SYSTEM  Level of Significance .05  59.53 59.05 33.69 58.66 60.38	MEDIAN STD DEV 95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s time a patient is in  H1= A significant is patient is in the FO  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	the FCC and the statistical differen	24,80 22,80 61,52 23,47 26 36231  al difference between of the Alternative  FY99 Base 80,59 78,11 62,33 78,40 82,77 5	SAMPLE SIZE MEAN STD DEV  TR= reen the mean of the FY99 FCC Stat the mean of the AFY99 FCC Stat Three Models' total time a patient  05 SIG =Z=+ OR -1:96  SAMPLE SIZE MEAN STD DEV	FY99 Base 36231 24.80 61.52 9.89 Reject Ho status Quo Models' patient is in the clin us Quo Models' me t is in the clinic.  Z-TEST  FY99 Base 36231 80.59	18042 20.88 30.89 mean total nic. Alt-3 18042 59.53

Comparison of Alternative-Three Models with Alternative-One Models (wait times)

WAITS TO B	IT E		Alternative-			
EXAMED	M/TH (Alt-3)	T/W/F (Alt-3)	Three Models	Alternative-One Models	M/TH (Alt-1)	T/W/F(Alt-
MEAN	19.87	21.55	20.88	19.28	19.01	19.46
MEDIAN	19.53	20.44	20.07	18.62	18.46	18.72
MIN	1:06	0.92	0.92	1.3	1.67	1.59
MAX	182.33	186.27	186.27	370.4	319.98	299.98
STD DEV	30.21	30.89	30.89	61.52	53.05	49.73
95% CI LOW	/ 19.36	20.84	20.25	18.70	18.39	18.91
95% CI HIGH	l 20.38	22.26	21.50	19.86	19.63	20.02
SAMPLE SIZI	E <b>725</b> 0	10792	18042	36250	14567	21683
TIME PATIEN IN CLINIC	T					
MEAN	£7 00	en eo	ENTER			19. 19.
MEDIAN	57.88 57.68	60.63 59.97	59.53 59.05	72.35	71.2	73.13
MIN	16.62	59.97 13.48	59.05 13.48	71,48 17:57	70.15	72.38
MAX	215.62	98.23	215.62	17.57 391.53	17.62	15.95
STD DEV	33.17	14.13	33.69	391.53 62.33	334,2 52.76	324.42
95% CI LOW		59.7	58.66	62.33 71.24	52.76 69.97	51.41 72.09
95% CI HIGH		61.56	60.38	73.47	72.43	72.09 74.17
SAMPLE SIZE		10792	18042	36250	72.43 14567	21683
	Ho= There is no s	significant statistic		tween the mean of the Alternative	-One Models' total ti	me a natient
Level of Significance .05	see a PCP and tr	e mean or the A		Models' total time a patient waits		
20.88	MEAN		Alt-1 19.28	.05 SIG =Z=+ OR -1.96	Z-TEST	
20.07	MEDIAN	n Silva Asiliy A Silva Asiliya	19.20	그는 그는 그가입니다 전하다면서 그리고 그것		*. 
30.89	<ul> <li>Assistant and the control of the contr</li></ul>		40.60			
	STD DEV		18.62 61.52	SAMDI E SIZE	Alt-1	Alt-3
CONTRACTOR CONTRACTOR	STD DEV 95% CI LOW		61.52	SAMPLE SIZE	36250	18042
20.25	95% CI_LOW		61.52 18.70	MEAN	36250 19.28	18042 20.88
1 M 6 275 1 26 4			61.52 18.70 20		36250	18042
20.25 21.50	95% CI LOW 95% CI HIGH		61.52 18.70	MEAN STD DEV.	36250 19.28 61.52	18042 20.88
20.25 21.50	95% CI LOW 95% CI HIGH		61.52 18.70 20	MEAN STD DEV.	36250 19.28 61.52 = -4.02	18042 20.88
20.25 21.50	95% CI LOW 95% CI HIGH SAMPLE SIZE Ho= There is no s	gnificant statistic C and the mean	61,52 18,70 20 36250 al difference bet	MEAN STD DEV.	36250 19.28 61.52 = -4.02 Reject Ho One Models' mean	18042 20.88 30.89
20.25 21.50 18042  ME PATIENT IN SYSTEM  Level of	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s patient is in the FC	C and the mean	61.52 18.70 20 36250 al difference bet of the Alternativ	MEAN STD DEV. TR ween the mean of the Alternative	36250 19.28 61.52 = -4.02 Reject Ho One Models' mean ont is in the clinic.  Models' mean total	18042 20.88 30.89
20.25 21.50 18042 ME PATIENT N SYSTEM Level of	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s patient is in the FC	C and the mean	61.52 18.70 20 36250 al difference bet of the Alternativ ce exist betweer emative-Three M	MEAN STD DEV.  TR ween the mean of the Alternative-e-Three Models' total time a patie of the mean of the Alternative-One flodels' total time a patient is in the	36250 19.28 61.52  = -4.02 Reject Ho One Models' mean total e clinic.	18042 20.88 30.89
20.25 21.50 18042 ME PATIENT N SYSTEM  Level of significance .05	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s patient is in the FC  H1= A significant in the FCC and the	C and the mean	61.52 18.70 20 36250 al difference bet of the Alternativ ce exist betweer emative-Three M	MEAN STD DEV  TR  ween the mean of the Alternative e-Three Models' total time a patie	36250 19.28 61.52 = -4.02 Reject Ho One Models' mean ont is in the clinic.  Models' mean total	18042 20.88 30.89
20.25 21.50 18042  ME PATIENT IN SYSTEM  Level of lignificance .05	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s patient is in the FC  H1= A significant in the FCC and the	C and the mean	61.52 18.70 20 36250 al difference bet of the Alternativ ce exist betweer emative-Three M	MEAN STD DEV.  TR ween the mean of the Alternative-e-Three Models' total time a patie of the mean of the Alternative-One flodels' total time a patient is in the	36250 19.28 61.52  = -4.02 Reject Ho One Models' mean total e clinic.	18042 20.88 30.89 rotal time a
20.25 21.50 18042  ME PATIENT IN SYSTEM  Level of ignificance .05 59.53 59.05	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s patient is in the FC  H1= A significant in the FCC and the  MEAN MEDIAN	C and the mean	61.52 18.70 20 36250 al difference bet of the Alternativ ce exist betweer emative-Three M Alt-1 72.35 71.48	MEAN STD DEV  TR  ween the mean of the Alternative-e-Three Models' total time a patient is in the fodels' total time a patient is in th	36250 19.28 61.52  = -4.02 Reject Ho One Models' mean of the clinic.  Models' mean total of clinic.  Z-TEST  Alt-1	18042 20.88 30.89 rotal time a time a patient
20.25 21.50 18042 ME PATIENT IN SYSTEM Level of ignificance .05 59.53 59.05 33.69	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s patient is in the FC  H1= A significant in the FCC and the  MEAN MEDIAN STD DEV	C and the mean	61.52 18.70 20 36250 al difference bet of the Alternativ ce exist betweer emative-Three M Alt-1 72.35 71.48 62.33	MEAN STD DEV  TR  ween the mean of the Alternative-e-Three Models' total time a patient is in the fodels' total time a patient is in th	36250 19.28 61.52  = -4.02 Reject Ho One Models' mean total e clinic.  Z-TEST  Alt-1 36250	18042 20.88 30.89 rotal time a time a patient Alt-3 18042
20.25 21.50 18042 ME PATIENT N SYSTEM Level of ignificance .05 59.53 59.05 33.69 58.66	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s patient is in the FC  H1= A significant in the FCC and the  MEAN MEDIAN STD DEV 95% CI LOW	C and the mean	61.52 18.70 20 36250 al difference bet of the Alternativ ce exist betweer emative-Three M Alt-1 72.35 71.48 62.33 71.24	MEAN STD DEV  TR  ween the mean of the Alternative-e-Three Models' total time a patient is in the lodels' total time a patient is in the lodels' total time a patient is in the lose SIG =Z=+ OR -1.96  SAMPLE SIZE MEAN	36250 19.28 61.52  = -4.02 Reject Ho One Models' mean of the clinic.  Models' mean total actinic.  Z-TEST  Alt-1 36250 72.35	18042 20.88 30.89 rotal time a time a patient Alt-3 18042 59.53
20.25 21.50 18042 ME PATIENT N SYSTEM Level of lignificance .05 59.53 59.05 33.69	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s patient is in the FC  H1= A significant in the FCC and the  MEAN MEDIAN STD DEV	C and the mean	61.52 18.70 20 36250 al difference bets of the Alternativ ce exist betweer emative-Three M Alt-1 72.35 71.48 62.33 71.24 73.47	MEAN STD DEV  TR  ween the mean of the Alternative-e-Three Models' total time a patient is in the fodels' total time a patient is in th	36250 19.28 61.52  = -4.02 Reject Ho One Models' mean total e clinic.  Z-TEST  Alt-1 36250	18042 20.88 30.89 rotal time a time a patient Alt-3 18042
20.25 21.50 18042 ME PATIENT N SYSTEM Level of ignificance .05 59.53 59.05 33.69 58.66 60.38	95% CI LOW 95% CI HIGH SAMPLE SIZE  Ho= There is no s patient is in the FC  H1= A significant in the FCC and the  MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	C and the mean	61.52 18.70 20 36250 al difference bet of the Alternativ ce exist betweer emative-Three M Alt-1 72.35 71.48 62.33 71.24	MEAN STD DEV  TR  ween the mean of the Alternative e-Three Models' total time a patie  the mean of the Alternative-One lodels' total time a patient is in the  .05 SIG =Z=+ OR -1.96.  SAMPLE SIZE MEAN STD DEV	36250 19.28 61.52  = -4.02 Reject Ho One Models' mean of the clinic.  Models' mean total actinic.  Z-TEST  Alt-1 36250 72.35	18042 20.88 30.89 total time a time a patien Alt-3 18042 59.53

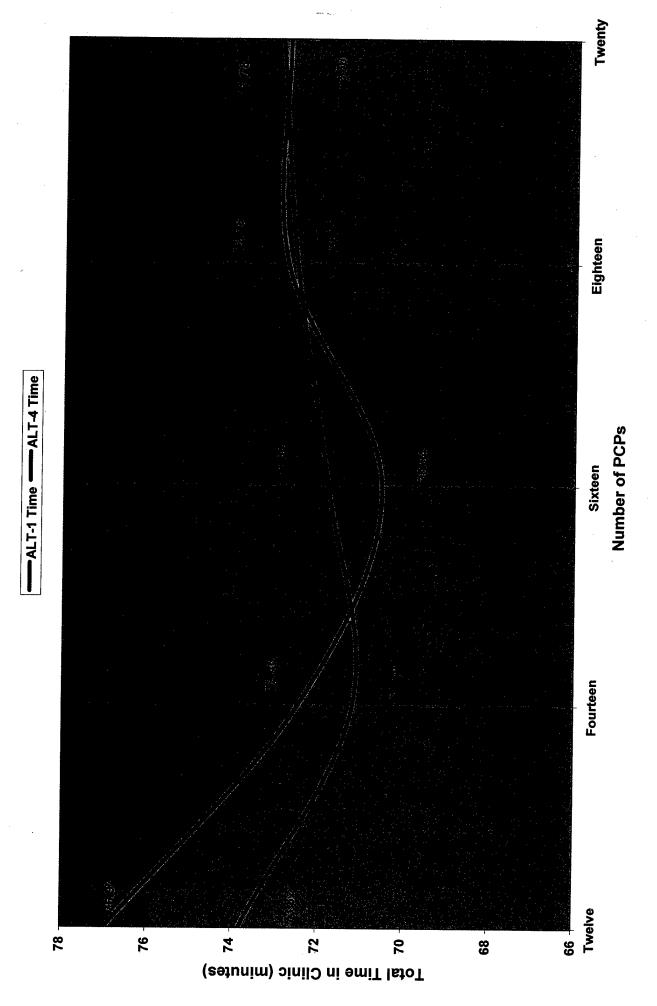
Reject Ho

Comparison of Alternative-Four Models with FY99 Status Quo Models (wait times) TIME PATIENT WAITS TO BE Alternative-FY99 FCC Status Quo **EXAMED** M/TH (Alt-4) T/W/F (Alt-4) Four Models Model (Base) WTH (Base) T/W/F (Base) MEAN 27.5 28.12 27.87 24.80 23.41 25.73 MEDIAN 26.68 27.3 27.05 22.80 21.91 23.39 MIN 0.65 0.68 0.68 1.3 1.93 1.3 MAX 198.55 251.98 251.98 370.4 241.1 370.4 STD DEV 32.98 41.88 41.88 61.52 39.86 61.52 95% CI LOW 26.53 27.23 26.95 23.47 22.24 24.29 95% CI HIGH 28.47 29.01 28.79 26.13 24.59 27.17 SAMPLE SIZE 14567 21683 36250 36231 14570 21661 TIME PATIENT IN CLINIC MEAN 71.2 72.16 71.77 80.59 78.72 81.84 MEDIAN 70.05 71.77 71.08 78.11 76.64 79.1 MIN 14.83 16.75 16.75 17.57 17.79 17.57 MAX 249.78 313.42 249.78 391.53 287.9 391.53 STD DEV 39.16 49.45 38.84 62.33 45.02 62.33 95% CI LOW 69.8 70.89 70.45 78.40 76.55 79.64 95% CI HIGH 72.61 73.44 73.11 82.77 80.9 84.03 SAMPLE SIZE 14567 21683 36250 36231 14570 21661 Ho= There is no significant statistical difference between the mean of the FY99 FCC Status Quo Models' total time a patient waits to see a PCP and the mean of the Alternative four Models' total time a patient waits to see a TIME PATIENT WAITS TO BE **EXAMED** H1= A significant statistical difference exist between the mean of the FY99 FCC Status Quo Models' total time a Level of patient waits to see a PCP and the mean of the Alternative Four Models' total time a patient waits to see a PCP. Significance .05 FY99 Base .05 SIG =Z=+ OR -1.96 Z-TEST 27.87 MEAN 24.80 27.05 **MEDIAN** 22.80 FY99 Base Alt-4 STD DEV 41.88 61.52 SAMPLE SIZE 36231 36250 26.95 95% CI LOW 23.47 MEAN 24.80 27.87 95% CI HIGH 28.79 26 STD DEV 61.52 41.88 36250 SAMPLE SIZE 36231 TR= -7.86 Reject Ho Ho= There is no significant statistical difference between the mean of the FY99 FCC Status Quo Models' mean total time a patient is in the FCC and the mean of the Alterantive-Four Models' total time a patient is in the clinic. TIME PATIENT IN SYSTEM H1= A significant statistical difference exist between the mean of the FY99 Status Quo Models' mean total time a I evel of patient is in the FCC and the mean of the Alternative-Four Models' total time a patient is in the clinic. Significance .05 FY99 Base .05 SIG =Z=+ OR -1.96 **Z-TEST** 71.77 MEAN 80.59 71.08 **MEDIAN** 78.11 FY99 Base FY00 (Alt-4) 38.84 STD DEV 62.33 SAMPLE SIZE 36231 36250 70.45 95% CI LOW 78.40 MEAN 80.59 71.77 73.11 95% CI HIGH 82.77 STD DEV 62.33 38.84 36250 SAMPLE SIZE 36231 TR= 22.84

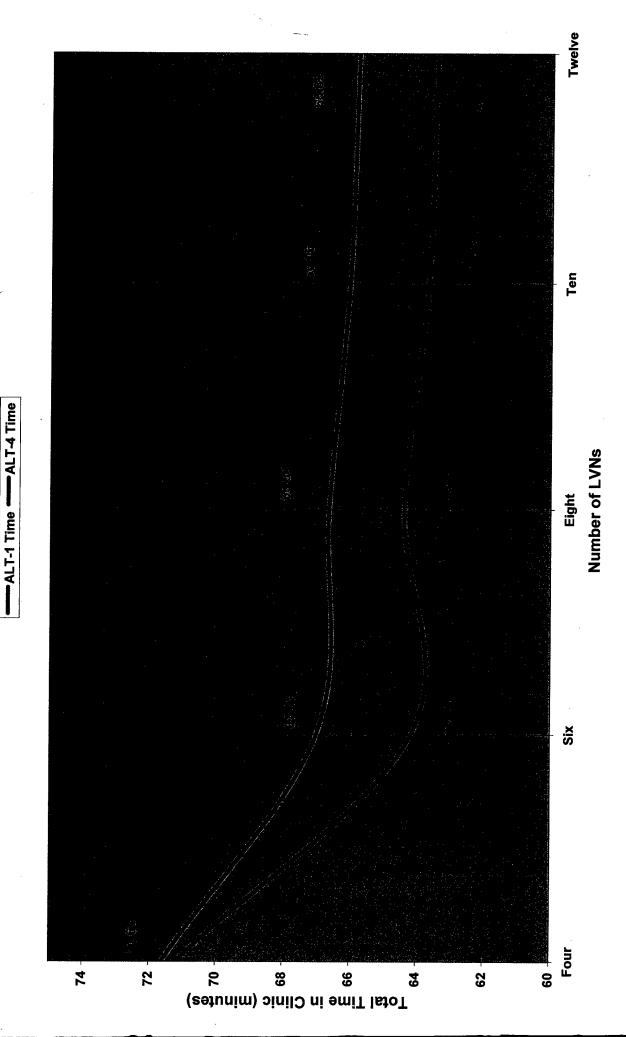
Comparison of Alternative-Four Models with Alternative-One Models (wait times)

TIME PATIENT						
WAITS TO BE			Alternative-			1
EXAMED	M/TH (Alt-1)	T/W/F (Alt-4)	Four Models	Alternative-One Models	M/TH (Alt-1)	T/W/F (Alt
MEAN	27.5	28/12	27.87	19.28	19.01	19.46
MEDIAN	26.68	27.3	27.05	18.62	18.46	18.72
MIN	0.65	0.68	0.68	1.3	1.67	1.59
MAX	198.55	251.98	251.98	370.4	319.98	299.98
STD DEV	32.98	41.88	41.88	61.52	53.05	49.73
95% CI LOW	26.53	27.23	26.95	18.70	18.39	18.91
95% CI HIGH	28.47	29.01	28.79	19.86	19.63	20.02
SAMPLE SIZE	14567	21683	36250	36250	14567	21683
TIME PATIENT IN CLINIC						
MEAN	71,2	72.16	71.77	72.35	71.2	73.13
MEDIAN	70.05	71.77	71.08	71.48	70.15	72.38
MIN	14.83	16.75	16.75	17.57	17.62	15.95
MAX	249.78	313.42	249.78	391,53	334.2	324.42
STD DEV	39.16	49.45	38.84	62.33	52.76	51.41
95% CI LOW	69.8	70.89	70.45	71.24	69.97	72.09
95% CI HIGH	72.61	73.44	73.11	73.47	72,43	74.17
SAMPLE SIZE	14567	21683	36250	36250	14567	21683
	Ho= There is no s	significant statistic	al difference bet	ween the mean of the Alter	antive-One Models	s' total time a
EXAMED	H1= A significant	statistical differen	nce exist between	n the mean of the Alternativ	e-One Models' tot	al time a nat
EXAMED Level of	H1= A significant waits to see a PC	statistical differer P and the mean o	nce exist between	n the mean of the Altemativ ⊱Four Models' total time a p	e-One Models' tot patient waits to see	al time a pati e a PCP.
EXAMED  Level of Significance	H1= A significant waits to see a PC	statistical differer P and the mean o	nce exist between of the Alternative	⊱Four Models' total time a p	e-One Models' tot atient waits to see Z-TEST	al time a pat e a PCP.
EXAMED  Level of Significance	H1= A significant waits to see a PC MEAN	statistical differer P and the mean	of the Alternative	⊱Four Models' total time a p	patient waits to see	al time a pati e a PCP.
EXAMED  Level of Significance .05	waits to see a PC	statistical differer P and the mean	of the Alternative Alt-1	⊱Four Models' total time a p	patient waits to see	al time a pat e a PCP. Alt-4
EXAMED Level of Significance .05 27.87 27.05 41.88	waits to see a PC	statistical differer P and the mean	of the Alternative Alt-1 19:28	⊱Four Models' total time a p	atient waits to see	e a PCP.
Level of Significance .05 27.87 27.05	waits to see a PC  MEAN  MEDIAN	statistical differer P and the mean	of the Alternative Alt-1 19:28 18:62	⊱Four Models' total time a p	atient waits to see Z-TEST Alt-1	e a PCP.  Alt-4
EXAMED  Level of Significance .05  27.87 27.05 41.88 26.95 28.79	MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	statistical differer P and the mean o	of the Alternative Alt-1 19:28 18:62 61:52	÷Four Models' total time a p .05 SIG =Z=+ OR -1.96 SAMPLE SIZE	z-TEST  Alt-1 36250	Alt-4 36250
EXAMED Level of Significance .05 27.87 27.05 41.88 26.95	MEAN MEDIAN STD DEV 95% CI. LOW	statistical differer P and the mean o	of the Alternative Alt-1 19:28 18:62 61:52 18:70	Four Models' total time a p .05 SIG =Z=+ OR -1.96 SAMPLE SIZE MEAN	Z-TEST  Alt-1 36250 19.28	Alt-4 36250 27.87
EXAMED  Level of Significance .05  27.87 27.05 41.88 26.95 28.79	MEAN MEDIAN STD DEV 95% CI LOW 95% CI HIGH	statistical differer P and the mean	of the Alternative Alt-1 19:28 18:62 61:52 18:70 20	Four Models' total time a p .05 SIG =Z=+ OR -1.96 SAMPLE SIZE MEAN STD DEV	Z-TEST  Alt-1 36250 19.28 61.52	Alt-4 36250 27.87
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Comparison of Alternative-One and Alternative-Four Models PCPs Effect on Total Time Patient is in the Clinic

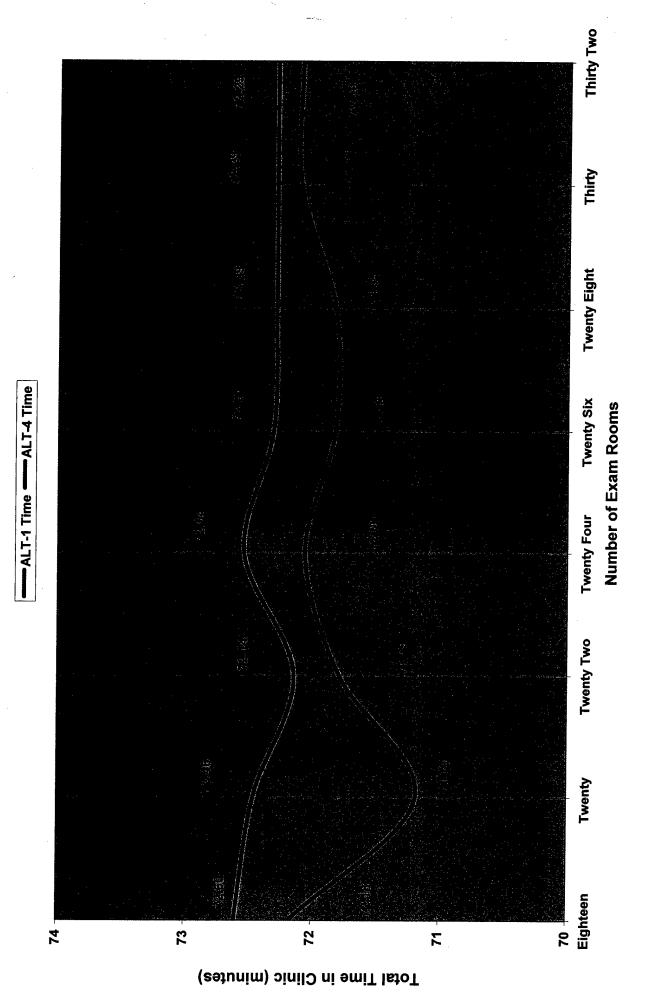


Comparison of Alternative-One and Alternative-Four Models LVNs Effect on Total Time Patient is in the Clinic



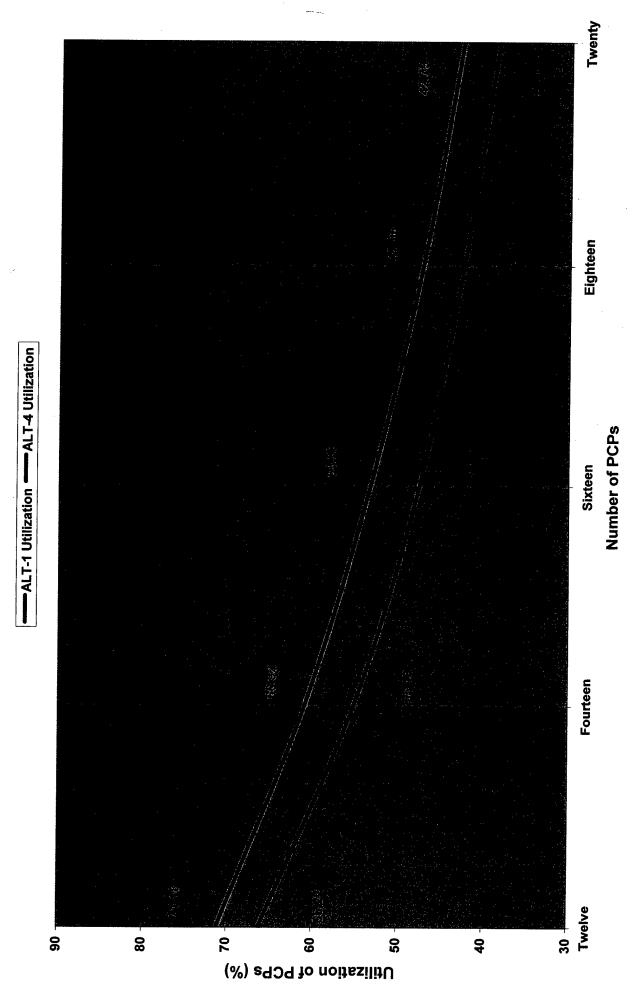
APPENDIX E-1

Comparison of Alternative-One and Alternative-Four Models Exam Rooms Effect on Total Time Patient is in the Clinic

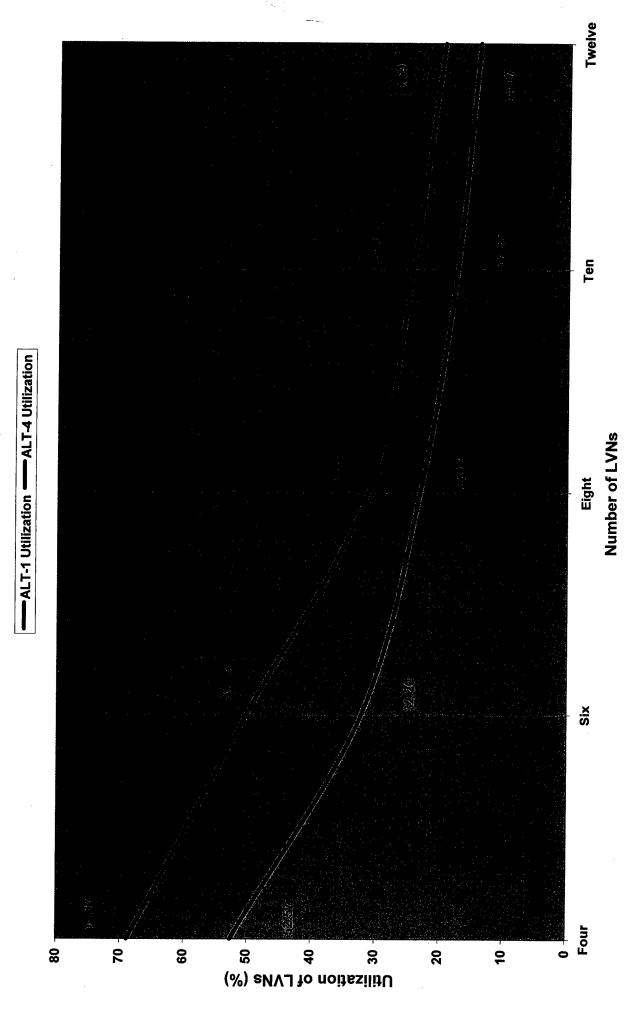


APPENDIX E-1

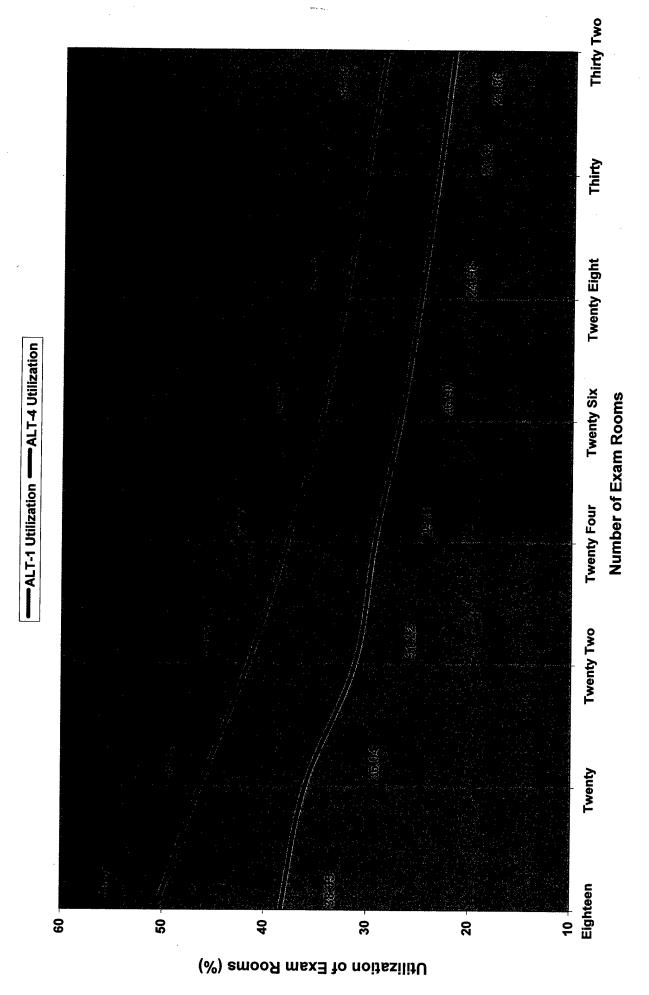
Comparison of Alternative-One and Alternative-Four Models PCPs Effect on Utilization of PCPs



Comparison of Alternative-One and Alternative-Four Models LVNs Effect on Utilization of PCPs

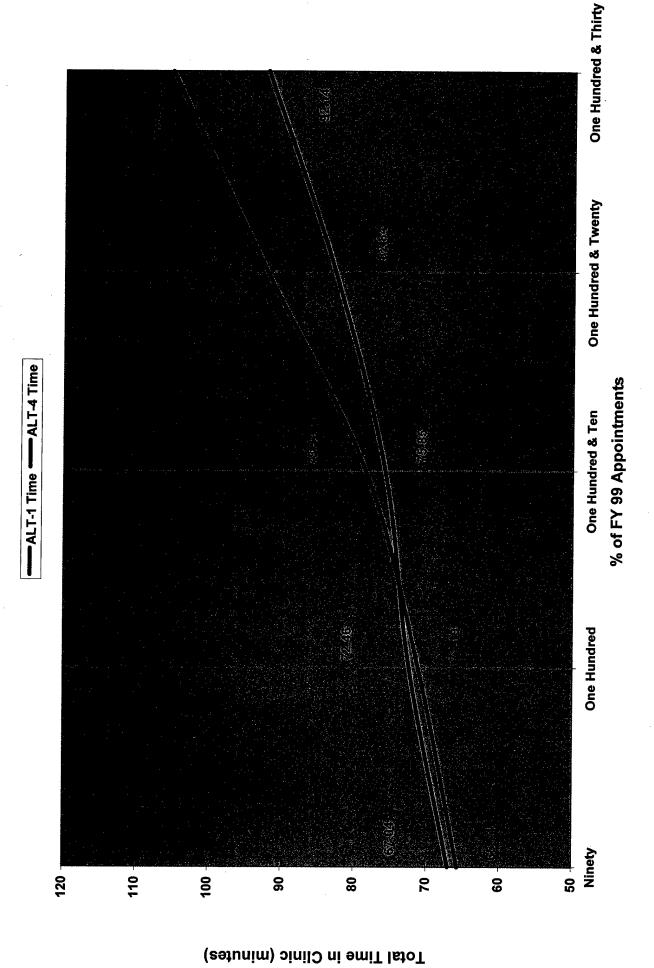


Comparison of Alternative-One and Alternative-Four Models Exam Rooms Efect on Utilization of Exam Rooms



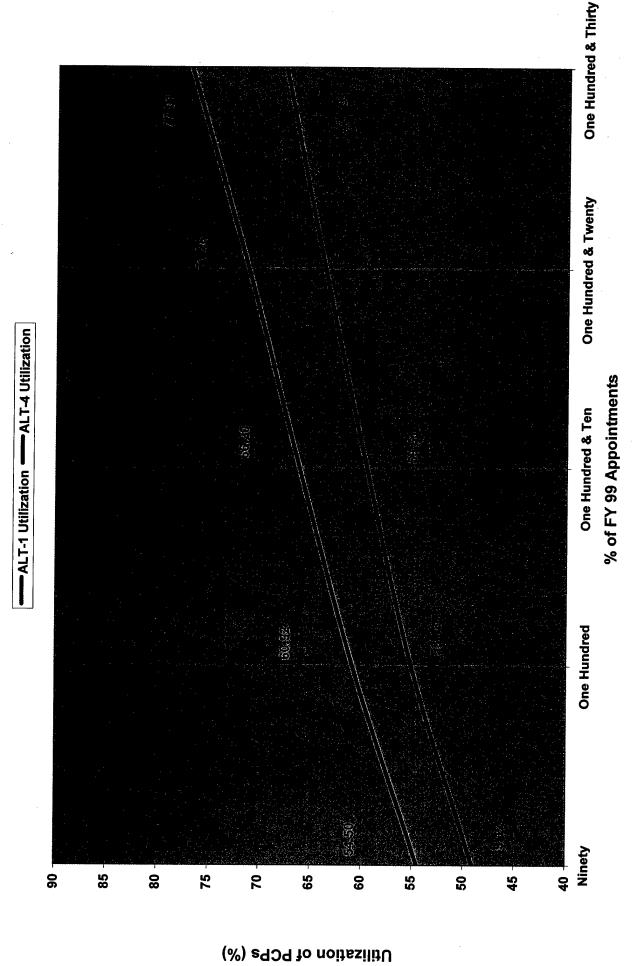
APPENDIX E-2

Comparison of Alternative-One and Alternative-Four Models % of FY 99 Appointments Effect on Total Time Patient is in the Clinic



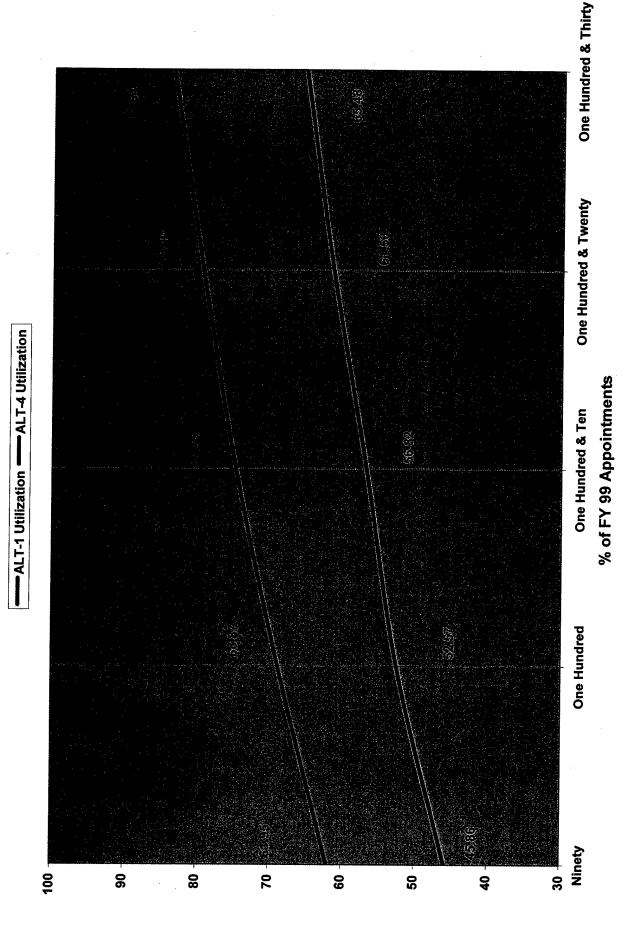
**APPENDIX E-3** 

Comparison of Alternative-One and Alternative-Four Models % of FY 99 Appointments Effect on Utilization of PCPs



APPENDIX E-4

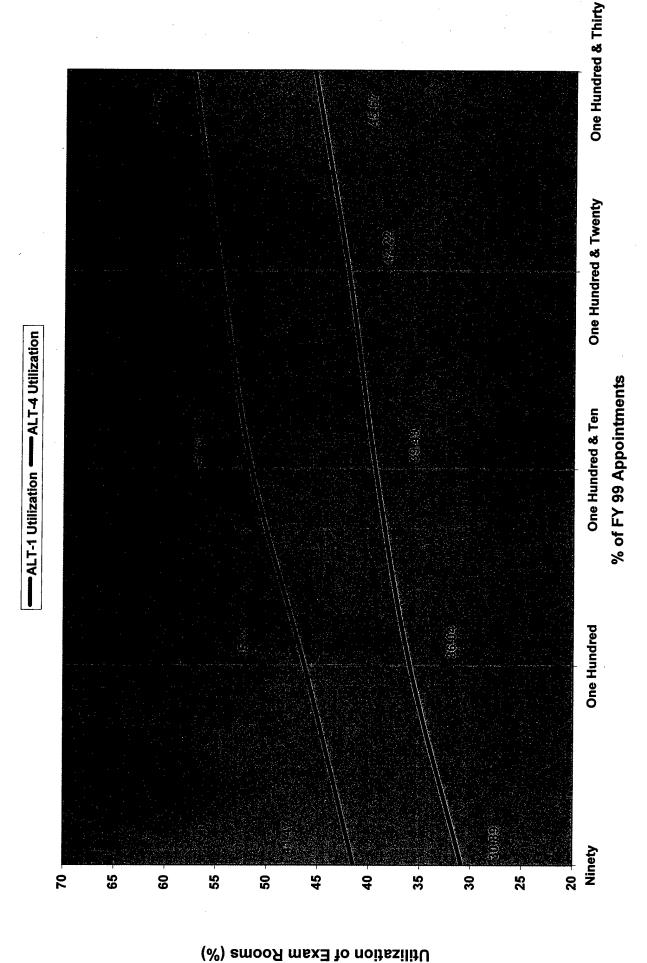
Comparison of Alternative-One and Alternative-Four Models % of FY 99 Appointments Effect on Utilization of LVNs



Utilization of LVNs (%)

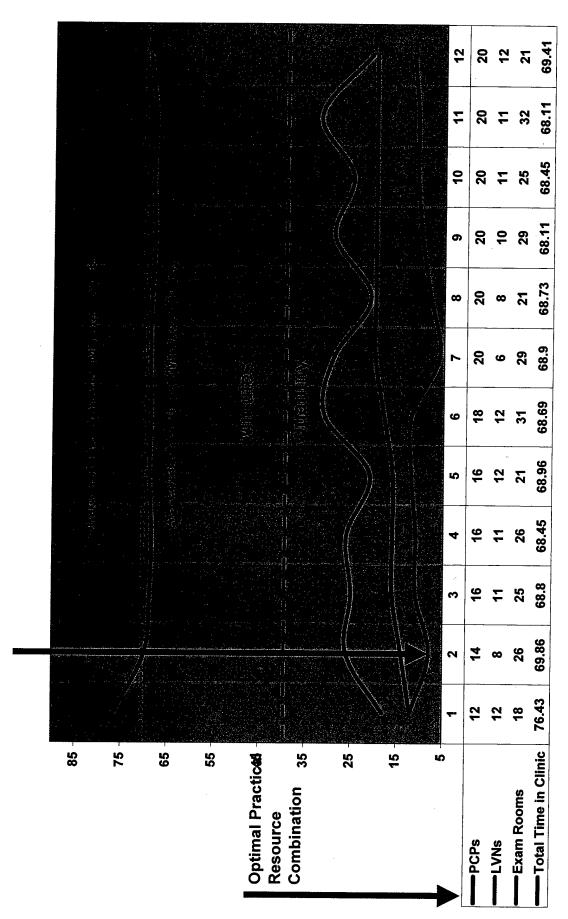
APPENDIX E-4

Comparison of Alternative-One and Alternative-Four Models % of FY 99 Appointments Effect on Utilization of Exam Rooms

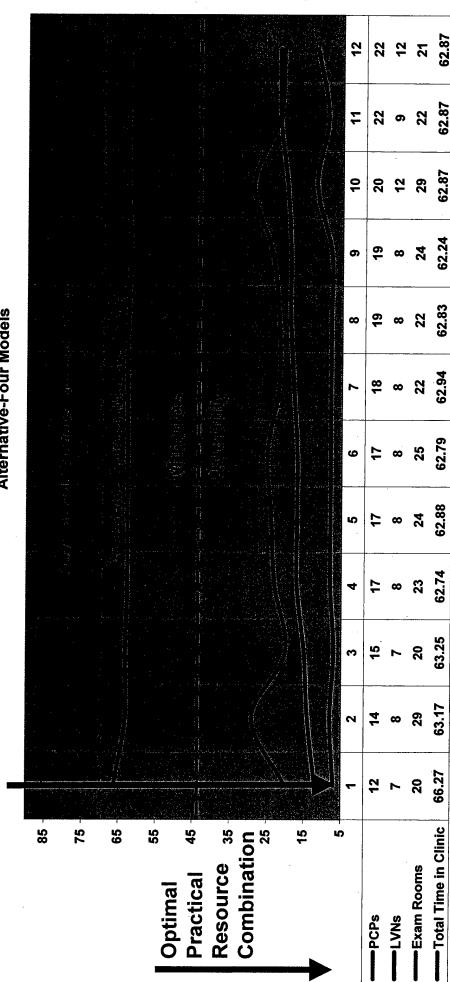


APPENDIX E-4

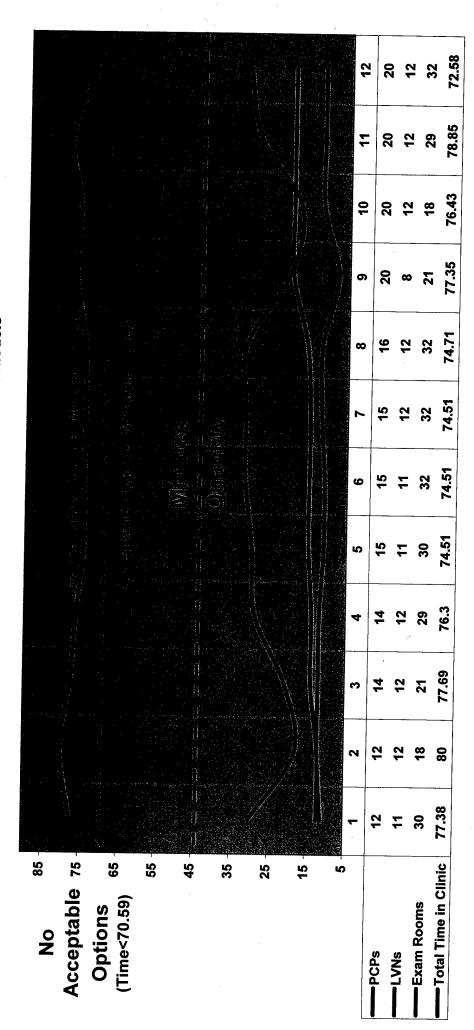
Optimal Combinations of Multiple Resources for 110% of FCC FY 99 Appointments with Alternative-One Models



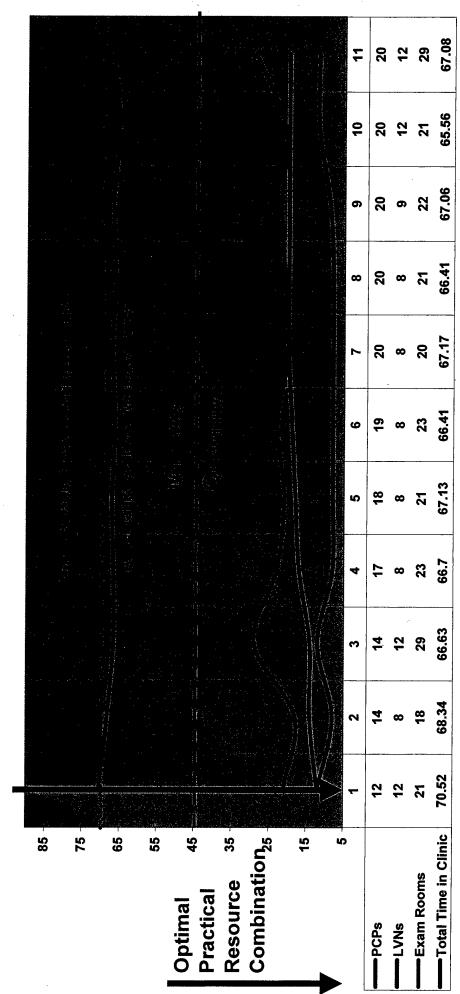
Optimal Combinations of Multiple Resources for 110% of FCC FY 99 Appointments with **Alternative-Four Models** 



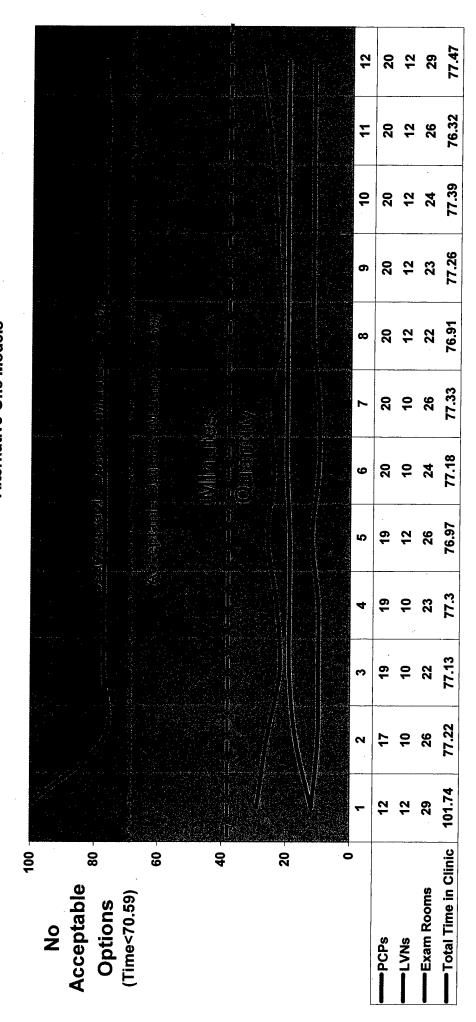
Optimal Combinations of Multiple Resources for 120% of FCC FY 99 Appointments with Alternative-One Models



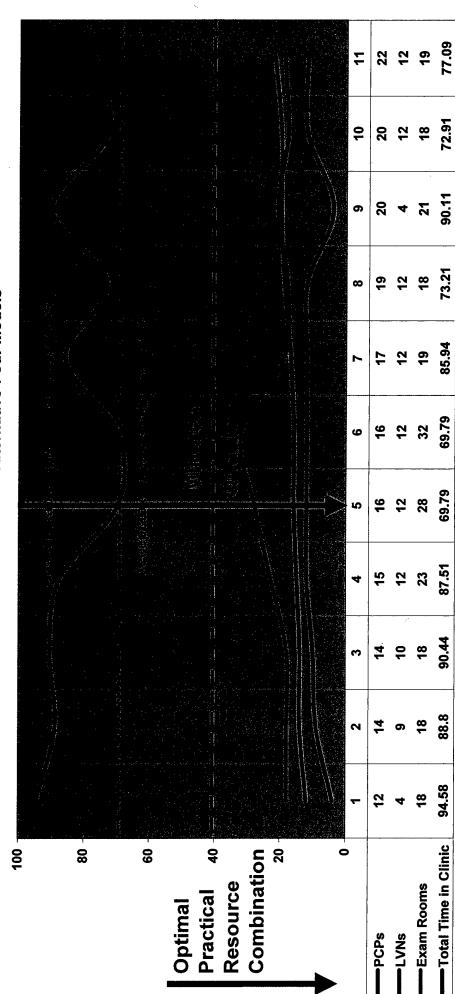
Optimal Combinations of Multiple Resources for 120% of FCC FY 99 Appointments with **Alternative-Four Models** 



Optimal Combinations of Multiple Resources for 130% of FCC FY 99 Appointments with Alternative-One Models



Optimal Combinations of Multiple Resources for 130% of FCC FY 99 Appointments with **Alternative-Four Models** 



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